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ELECTRICITY DEMAND FORECAST COMPARISON REPORT

STAFF REPORT

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TABLE OF CONTENTS

CHAPTER 1	1
INTRODUCTION	1
Limitations Resulting from Confidentiality Disputes	1
CHAPTER 2.....	3
PACIFIC GAS & ELECTRIC PLANNING AREA.....	3
Residential Forecast Comparison	5
Nonresidential Forecast Comparisons	9
Commercial Sector	9
Industrial and Agriculture.....	11
CHAPTER 3.....	13
SOUTHERN CALIFORNIA EDISON PLANNING AREA	13
Residential Forecast Comparison	16
Commercial Sector Energy Forecasts	20
Industrial and Agriculture Sector Energy Forecasts	21
Self-Generation	23
CHAPTER 4.....	24
SAN DIEGO GAS & ELECTRIC PLANNING AREA.....	24
Residential Forecast Comparison	26
Nonresidential Sector Energy Forecasts Comparisons	30
Self-Generation	31
CHAPTER 5.....	33
SACRAMENTO MUNICIPAL UTILITY DISTRICT PLANNING AREA	33
Residential Forecast Comparison	35
Nonresidential Forecast Comparisons	39
CHAPTER 6.....	41
LOS ANGELES DEPARTMENT OF WATER AND POWER PLANNING AREA	41
Residential Forecast Comparison	43
Commercial Sector Forecast Comparison	44
Industrial Sector Comparison.....	45
CHAPTER 7.....	46
BGP ELECTRIC PLANNING AREA	46
Endnotes.....	50
APPENDIX A: ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS OF SUBMITTED FORECASTS	51

CHAPTER 1

INTRODUCTION

As part of the 2005 Integrated Energy Policy Report (*Energy Report*) process, all load serving entities (LSEs) with annual peak demand greater than 200 megawatts (MW) were required to submit to the California Energy Commission (Energy Commission) electricity demand forecasts and supporting information. LSEs with annual peak demand below 200 MW were deemed exempt for this proceeding. The Energy Commission received the LSE forecasts in February 2005. Energy Commission staff has now published its own energy demand forecasts in *California Energy Demand 2006-2016: Staff Energy Demand Forecast (CED 2006)*¹.

This report compares the electricity demand forecasts submitted by the LSEs with staff's forecasts of annual electricity use and peak demand at the total level, and at the sectoral level where possible. The purpose of this report is to identify and explain differences between forecasts to provide a basis for Energy Commission decisions on what forecast or range of forecasts to adopt in the 2005 *Energy Report* proceeding.

These Energy Commission staff demand forecasts are made for geographic planning areas that may include numerous LSEs serving the end users within a geographic area. Staff attempts to cover the entirety of end user loads within its demand forecasts for these geographic areas. Accordingly, staff forecasts are compared to the aggregate of all LSEs submitting demand forecasts in each planning area. In some cases, staff has imputed forecasts for exempt LSEs to facilitate a more meaningful comparison. Because the percent of load that did not file is relatively small, this can be done without distorting the presentation of differences. Thus, data labeled as "aggregated forecasts" includes both submitted forecasts and a small portion of staff-imputed forecasts for exempt LSEs.

The scope of the planning areas that staff has used correspond closely to traditional groupings of utilities and other LSEs bound together through interconnection agreements, operating agreements and transmission planning practices. However, recent developments have altered some of these traditional groupings. For example, the municipal utilities of Redding and Roseville, and the federal customers of Western Area Power Administration (WAPA) in Northern California, are now formally part of the SMUD control area. For the purposes of this round of demand forecasts, staff includes Redding, Roseville and WAPA in the PG&E planning area.

Limitations Resulting from Confidentiality Disputes

Some parties have requested confidentiality for some of the demand forecast data submitted. While the Energy Commission has determined that the basic energy and peak demand data should be public for all LSEs, that determination was appealed to Sacramento Superior Court on June 10, 2005 by Southern California Edison (SCE). To maintain confidentiality of the data until the legal process is complete, staff uses

certain aggregation conventions in this report. Sales data submitted by energy services providers (ESPs) are aggregated with staff estimates of non-filing ESPs and publicly owned utilities. For SCE, San Diego Gas & Electric, and Pacific Gas & Electric, peak data are reported only at the planning area level.

CHAPTER 2

PACIFIC GAS & ELECTRIC PLANNING AREA

The Pacific Gas & Electric (PG&E) planning area includes (1) PG&E bundled retail customers, (2) customers served by various ESPs using the PG&E distribution system to deliver electricity to end users, and (3) customers of the various northern California municipal and irrigation district utilities within the PG&E transmission distribution area.

The LSEs in the PG&E planning area who submitted forecasts are PG&E, the cities of Roseville and Redding, Modesto and Turlock Irrigation Districts, Silicon Valley Power, and five ESPs. The submitted forecasts of the ESPs constitute over 90 percent of current direct access sales in the PG&E planning area. Direct access as a whole is currently about 9 percent of total retail sales in the PG&E planning area. The five public utilities who filed forecasts are over 60 percent of the total municipal load in the PG&E planning area. Publicly owned utilities (POUs), in total, make up about 16 percent of the PG&E total planning area consumption.

As Table 2-1 shows, both the staff consumption and peak forecasts are slightly higher than the aggregated planning area forecasts. Both the energy and peak forecast differences are within 1.5 percent in 2010. These forecast differences grow to slightly over 3.5 percent by the end of the forecast period. The annual growth rates of both the aggregated and staff forecasts are similar in both peak and consumption.

Table 2-1: Comparison of Forecasts for the PG&E Planning Area

	Consumption (GWH)				Gross Peak (MW)		
	Aggregated Forecasts	Staff Forecast	%difference		Aggregated Forecasts	Staff Forecast	%difference
2000	96,844	96,822	-0.02%		21,488	21,488	0.00%
2003	94,114	95,638	1.62%		21,259	21,259	0.00%
2008	102,677	103,180	0.49%		22,980	23,208	0.99%
2010	104,812	106,074	1.20%		23,525	23,873	1.48%
2013	108,015	110,769	2.55%		24,386	24,973	2.41%
2016	110,401	114,614	3.82%		25,036	25,919	3.52%
Annual Average Growth Rates							
2000-2003	-0.95%	-0.41%			-0.36%	-0.36%	
2003-2008	1.76%	1.53%			1.57%	1.77%	
2003-2016	1.24%	1.40%			1.27%	1.54%	
Historic values are shaded							

Figure 2-1 shows the staff forecast compared to the aggregated PG&E planning area forecasts. PG&E bundled retail customers make up the largest part of the aggregated forecast, about 75 percent of the total. The submitting POUs and ESPs make about 18 percent with the remaining 7 percent being small municipals and

ESPs with peak load less than 200 MW which were not required to submit demand forecasts.

Figure 2-1: PG&E Planning Area: Electricity Sales Forecasts

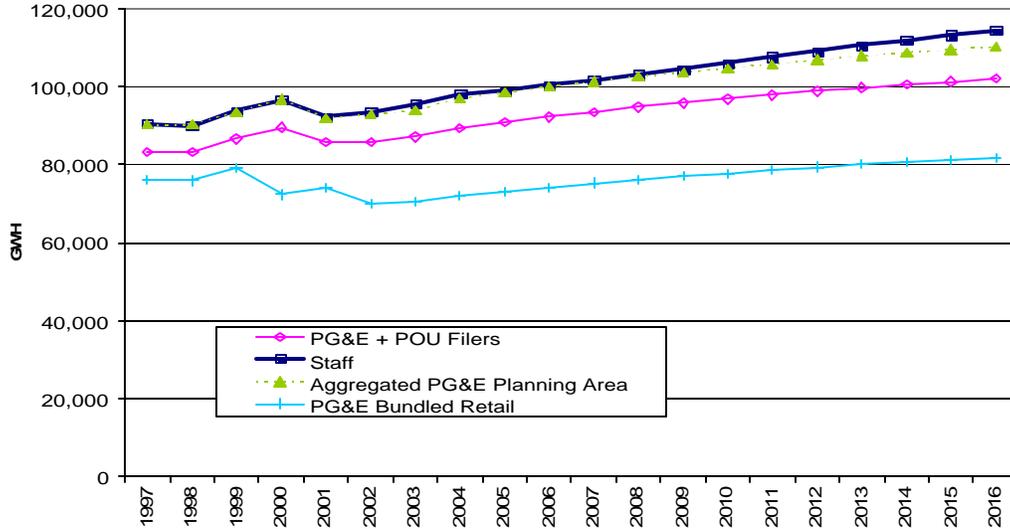
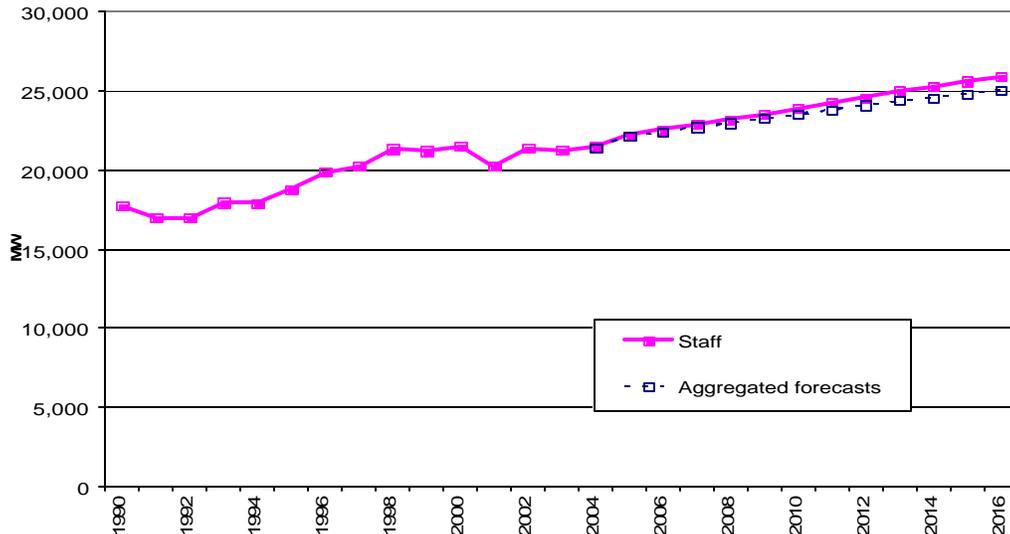


Figure 2-2 shows a comparison of the staff and aggregated peak forecasts at the planning area level.

Figure 2-2: PG&E Planning Area Peak Forecast Comparison



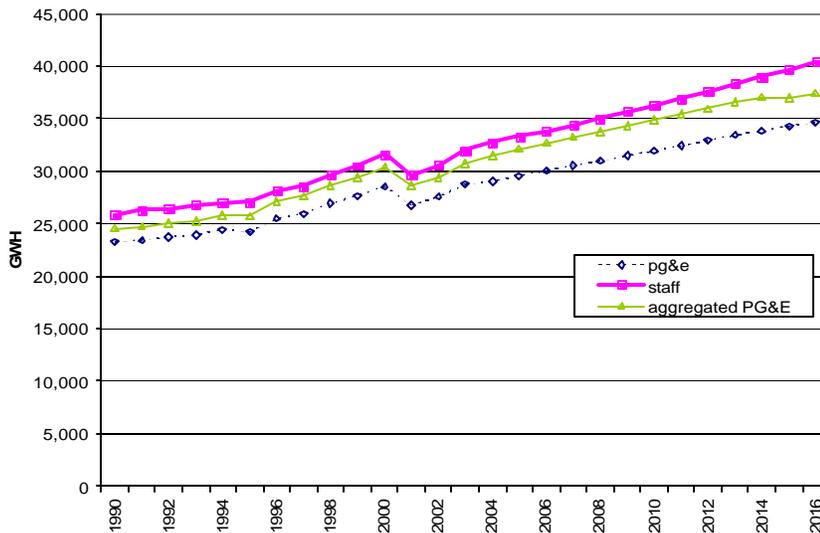
There are minor differences in accounting for losses and self generation which would bring the staff and aggregate peak forecasts into closer agreement, but overall the difference in peak forecasts at the PG&E planning area level is within what staff believes to be the practical error bounds of each of the respective

forecasts.² The peak differences that exist are primarily driven by the differences in the underlying electricity consumption forecasts, because the peak demand forecasting methodologies essentially translate energy forecasts into peak demand forecasts. The methodological differences between staff and LSEs are simply the level of detail at which this takes place.

Residential Forecast Comparison

Figure 2-3 shows the staff residential consumption forecast compared to the aggregated residential sector forecasts. One explanation for the difference between the aggregated forecasts and the staff forecast is the absence of residential forecasts for the non-filing small municipal utilities and ESPs. The 2003-2014 annual growth rates for the PG&E, PG&E aggregated and staff forecasts are 1.5, 1.7 and 1.8 percent, respectively. This indicates that the staff forecast grows at a slightly faster rate than the aggregated residential forecast. The drop in the aggregate forecast in the last two forecast years is due to the city of Roseville submitting a forecast only through 2014.

Figure 2-3: PG&E Planning Area Residential Electricity Forecasts

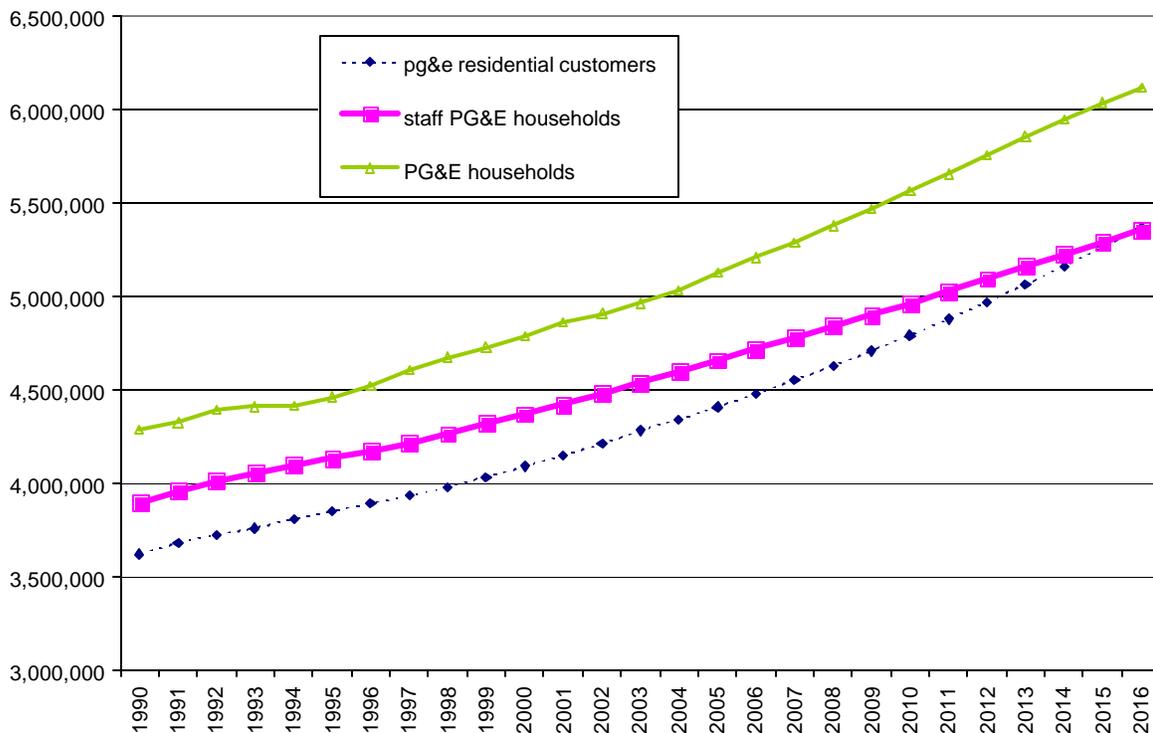


Although the comparative growth in residential consumption is similar for each of the forecasts, there are greater differences in the assumptions underlying the forecasts. Figure 2-4 presents the household forecasts driving the PG&E and staff forecast along with the PG&E residential customer forecast. It appears that the PG&E household forecast used to develop the PG&E electricity forecast includes households for the consolidated PG&E electric and gas service territories. This includes households in the SMUD service territory, which are outside the staff's definition of the PG&E planning area. The PG&E residential customer forecast more

closely approximates the staff version of the PG&E planning area minus the municipal customers.

Both the PG&E residential customer and household forecast grow at a faster rate than the staff forecast. PG&E is using Economy.com for its household projections and staff's household forecast is developed using Department of Finance (DOF) population projections. Staff derived households by forecasting persons per household rates which are consistent with the last 20 years of history. The major difference in these two projection methods is that the staff person per household forecast increases slightly over the forecast period and the underlying Economy.com person per household projection declines over the forecast period and thus increases the number of households in the PG&E planning area. Although PG&E does not explicitly provide population and persons per household in its forecast documentation, staff is basing its analysis on existing knowledge of the Economy.com forecast. Staff is using Economy.com for its economic drivers and has available to it the underlying population and household assumptions used in the PG&E forecast. In yet a third view of the future, the current Association of Bay Area Governments (ABAG) forecast indicates a constant persons per household level over the forecast period for the nine Bay Area counties.

Figure 2-4: PG&E Planning Area Household Forecasts



The impact on residential energy consumption of the higher PG&E household growth is somewhat offset by lower growth in use per household over the forecast period. Figure 2-5 provides a comparison of PG&E and staff residential use per household projections. The fact that the PG&E model uses the combined electric and gas (consolidated) service area to define households in its model produces an artificially low use per household value. Converting the PG&E residential forecast to use per residential customer value provides a result that is much closer to the staff estimate.

Both of the PG&E projections are expected to decrease over time due to an assumed continuation of residual conservation impacts of the electricity crisis and assumed energy efficiency program savings impacts. The staff residential forecast projects increasing use per household because the effects of increasing persons per household and household income overcome reductions due to building and appliance standards and committed program savings impacts. The staff residential forecast assumes no residual impact of behavioral conservation due to the energy crisis. The efficiency improvements installed due to the greatly expanded expenditures during the energy crisis continue to have impacts through the useful lives of the installed measures as would be the case for any other programs.

The higher staff historic use per residential customer values shown in Figure 2-5 are due to higher use per household, on average, of the municipal utilities included in the PG&E planning area. Figure 2-6 provides a comparison of use per household for the municipal utilities which submitted forecasts for this proceeding. With the exception of Silicon Valley Power (SVP), all of the reporting municipal utilities in the PG&E planning area have a higher use per household than the PG&E planning area as a whole, due to being in hotter inland regions and having lower electricity rates. This would cause the total use per household for the PG&E planning area to be higher than the PG&E electric distribution service area. Therefore most of the historic and forecast difference in level is due to these geographic definitional differences.

Figure 2-5: PG&E Planning Area Residential Electricity Use per Residential Unit (kWh)

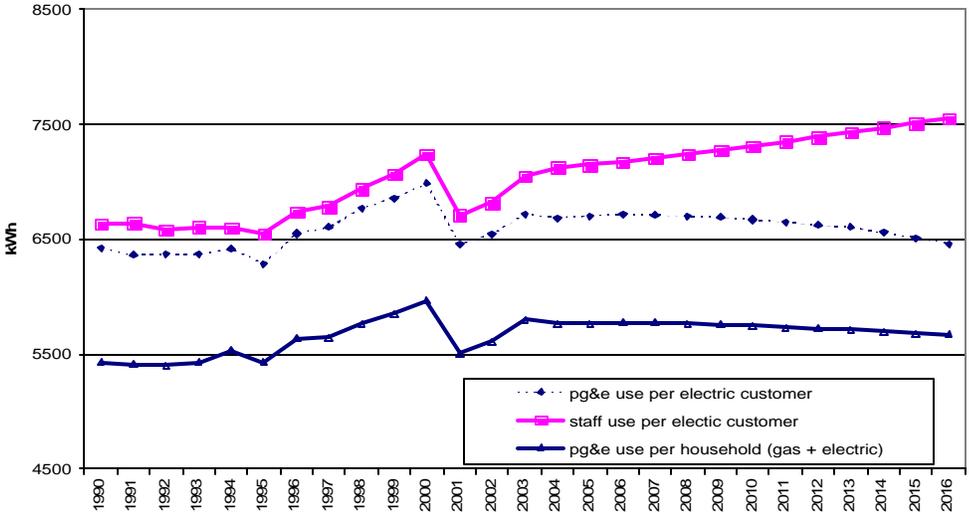
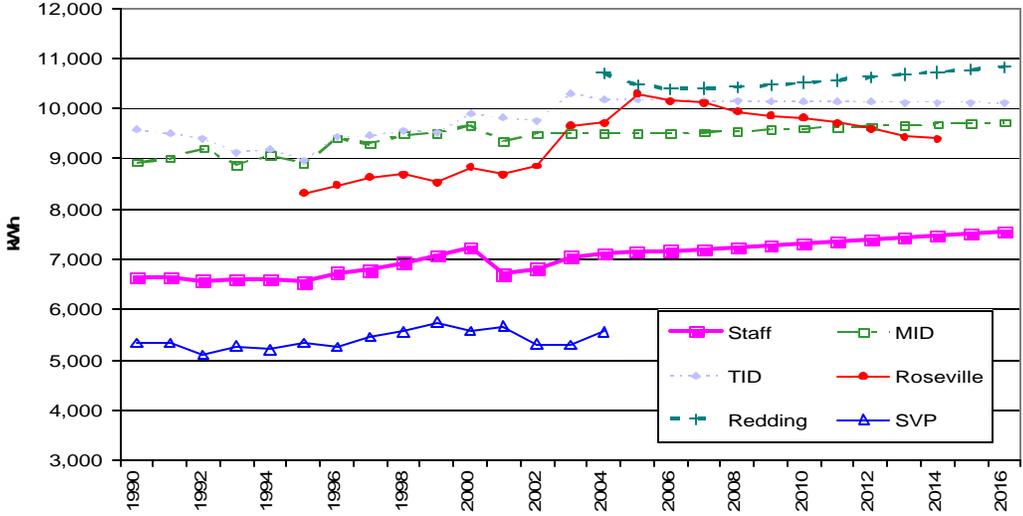


Figure 2-6: PG&E Planning Area Municipal Use per Household

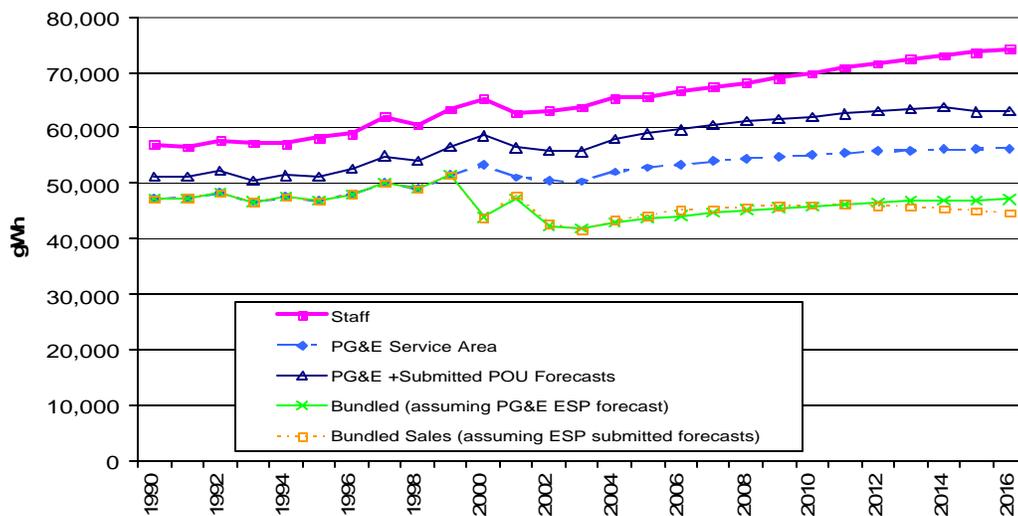


Nonresidential Forecast Comparisons

Figure 2-7 presents a comparison of the PG&E planning area nonresidential forecasts. The forecast PG&E submitted is for total retail sales (bundled plus direct access customers) in its service area. PG&E also submitted a forecast for direct access customers which is shown in the chart along with the aggregation of submitted ESP direct access and imputed non-filing ESP forecasts. The two versions of bundled loads (PG&E and ESP) shown in Figure 2-7 represent the PG&E service area forecast less PG&E's ESP forecast and PG&E's service area forecast less the aggregated ESP estimates of direct access loads through time.

The large difference between the submitted PG&E planning area nonresidential forecasts and the staff forecast is due to a large portion of nonresidential energy being served by the non-filing entities. A major portion is made up of water pumping loads from the Central Valley Project served by the Western Area Power Association (WAPA), which did not submit a forecast in this proceeding. Growth in the staff and aggregate PG&E forecast is similar through 2010, after which the staff forecast grows at a faster rate than the aggregate PG&E forecasts. This difference is primarily driven by the PG&E and staff forecast differences which are discussed below.

Figure 2-7: PG&E Planning Area Non-Residential Forecasts



Commercial Sector

Figure 2-8 presents a comparison of the staff and PG&E commercial sector forecasts. The projected 2003-2016 annual growth in both forecasts is very similar with both forecasts growing at an annual rate of approximately 1 percent. The agreement in commercial forecast growth is due to the agreement in relative growth

patterns of the respective commercial forecast drivers. Figure 2-9 presents a comparison of the annual change in primary commercial sector forecast drivers used in the respective forecasts. The PG&E commercial forecast uses Gross Metropolitan Product while the staff forecast uses square footage by building type. It is interesting to note that the projected growth in these different drivers is essentially the same.

Figure 2-8: PG&E Planning Area Commercial Sector Forecasts

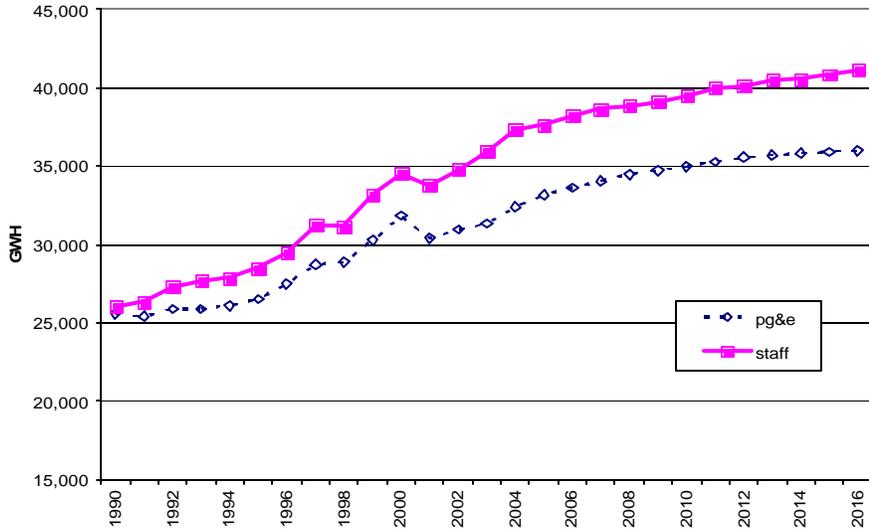
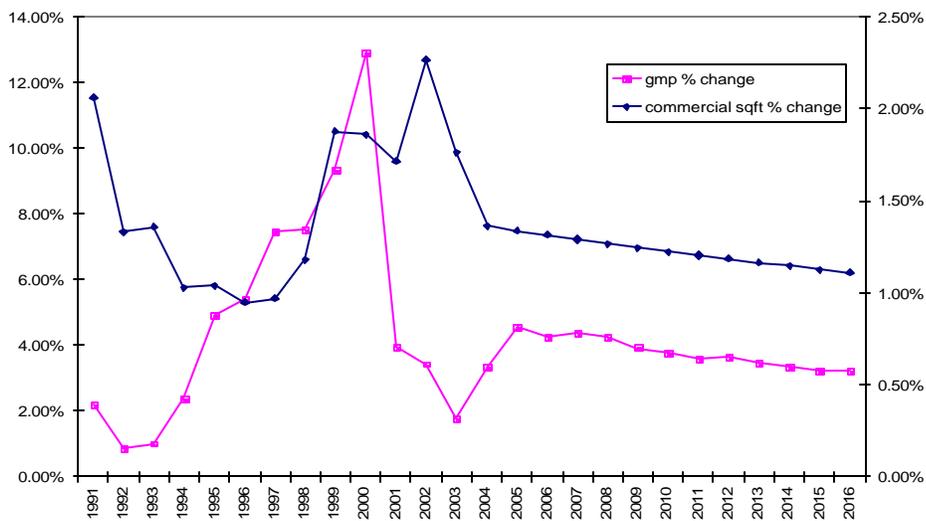


Figure 2-9: PG&E Planning Area Commercial Drivers



Industrial and Agriculture

The major differences between the nonresidential PG&E and staff forecasts are in the industrial and agricultural sectors. Figure 2-10 presents the industrial forecast comparison. The staff forecast projects an increase in industrial use over the forecast period while the PG&E forecast is flat. Both of these forecasts are in contrast to the recent historic decline. The staff forecast uses value-added projections from Economy.com that produce a net increase in industrial consumption over the forecast period, with growth in industries such as chemical manufacturing (including pharmaceuticals) and technology offsetting declines in other industries. The PG&E forecast seems to imply stagnant electricity growth in the industrial sector. Figure 2-10 also shows the collective industrial forecasts of the POUs who submitted forecasts. The POU industrial forecast grows at 2 percent annually over the forecast period, slightly faster than staff's. More than half of the POU industrial sales are by Silicon Valley Power (SVP). Although SVP did not forecast sales by sector, it provided historical industrial sales which account for about 85 percent of its total sales. Staff used this historical proportion to derive an industrial forecast. SVP's total sales forecast grows at an average of 1.9 percent annually, with faster growth in the next three years followed by a return to long-run average trends.

Figure 2-10: PG&E Planning Area Industrial Forecasts

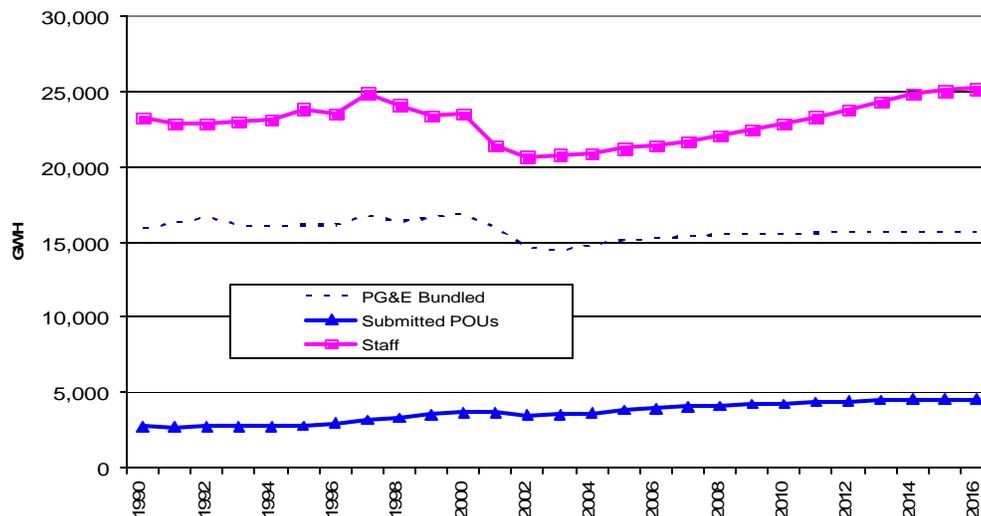
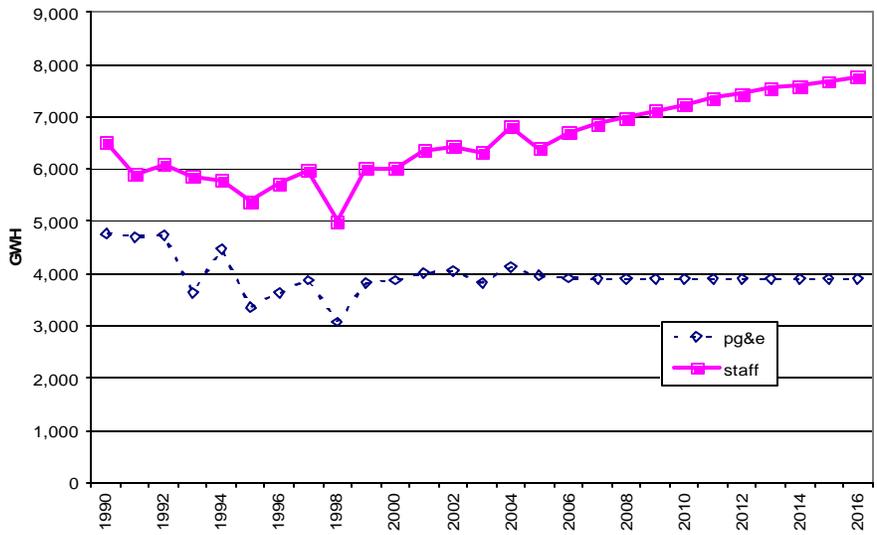


Figure 2-11 presents the agricultural forecast comparisons. The staff forecast projects an increase in agricultural use over the forecast period due to projected increases in water pumping requirements while the PG&E forecast is constant over the forecast period.

Figure 2-11: PG&E Planning Area Agriculture and Water Pumping Forecasts



CHAPTER 3

SOUTHERN CALIFORNIA EDISON

PLANNING AREA

The Southern California Edison (SCE) planning area includes (1) SCE bundled retail customers, (2) customers served by various ESPs using the SCE distribution system to deliver electricity to end users, and (3) customers of the various southern California municipal and irrigation district utilities within the SCE transmission distribution area.

The LSEs in the SCE planning area who submitted forecasts are SCE, the cities of Riverside and Anaheim, and five ESPs. The submitted forecasts of the ESPs constitute over 90 percent of direct access sales in the SCE territory. Direct access as whole is about 12 percent of sales in the SCE planning area. Publicly owned utilities are about 9 percent of sales in the planning area. The two municipal utilities who filed are more than 80 percent of that.

Table 3-1: Comparison of Forecasts for the SCE Planning Area

	Consumption (GWH)			Peak (MW)		
	Aggregated Forecasts	Staff Forecast	% Difference	Aggregated Forecasts	Staff Forecast	% Difference
1990	n/a	78,271		n/a	17,564	
2000	92,469	92,543	0.08%	20,369	19,465	-4.44%
2003	89,534	90,045	0.57%	20,261	19,907	-1.75%
2008	98,837	98,088	-0.76%	22,543	22,468	-0.33%
2010	102,689	100,821	-1.82%	23,419	23,156	-1.12%
2013	110,800	104,670	-5.53%	25,064	24,108	-3.82%
2016	119,984	108,500	-9.57%	26,786	25,066	-6.42%
Annual Average Growth Rates						
1990-2000	n/a	1.69%		n/a	1.03%	
2000-2003	-1.07%	-0.91%		-0.18%	0.75%	
2003-2008	2.00%	1.73%		2.16%	2.45%	
2003-2016	2.28%	1.44%		2.17%	1.79%	
Historic values are shaded						

As Table 3-1 shows, the aggregate of the LSE peak and energy demand forecasts grow faster than the staff forecast. Aggregated forecasts include staff's imputed forecasts for numerous, small exempt LSEs. By 2016, the aggregated energy use forecast is 9.5 percent higher than the staff forecast. The collective peak demand forecasts are almost 6 percent higher than staff's forecast.

Figure 3-1 shows the components of the aggregated energy forecast compared to the staff forecast. SCE, Anaheim, and Riverside have similar growth rates. The ESP forecasts also collectively grow at more than 2 percent annually, reflecting in part

assumptions by some ESPs that the market for direct access would reopen, as well as growth in usage per existing customer and other factors. Other ESPs assumed declining customer counts as a driver for their load forecasts. The ESP composite may mean the aggregated forecast effectively double-counts some customers, because the current suspension of direct access makes it difficult to add net new DA customers and the CPUC is not permitted to lift its suspension until DWR contracts have expired.

Figure 3-2 shows the aggregated peak forecast of all LSEs grouped together compared to the staff forecast. This is the only manner of aggregation that can preserve confidentiality for SCE's bundled peak demand forecast. The aggregated peak forecasts grow at 2.2 percent annually, while the staff grows at an average of 1.8 percent.

Figure 3-1: SCE Planning Area Sales Forecast Comparison

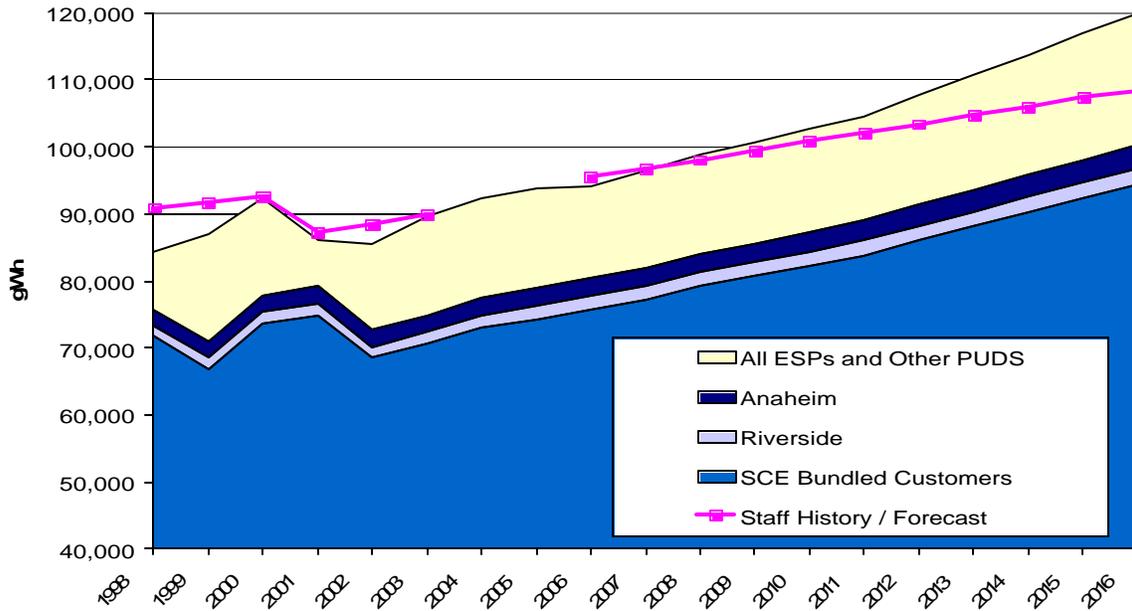
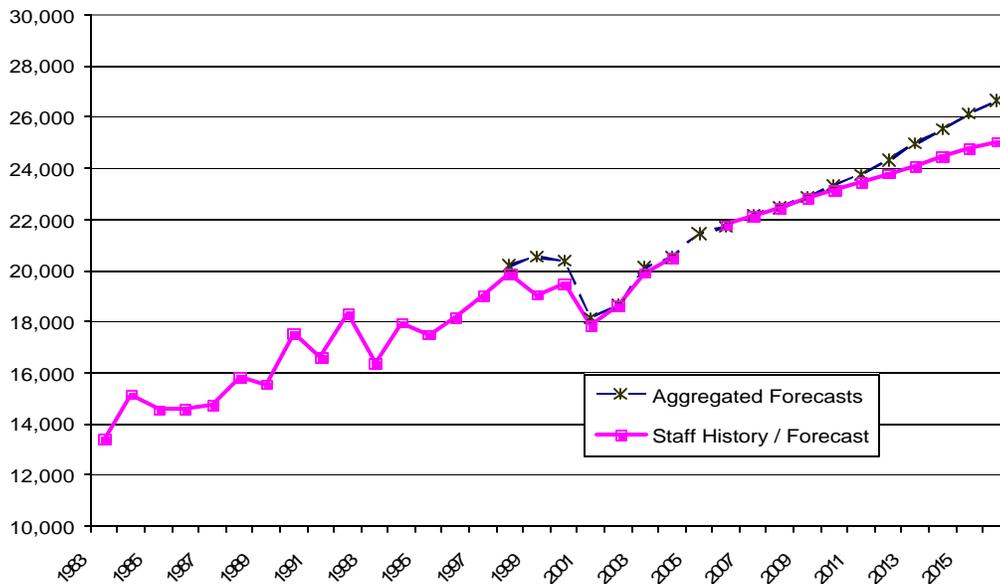


Figure 3-2: SCE Planning Area Peak Forecast Comparison



Residential Forecast Comparison

Figure 3-3 shows the staff forecast compared to the aggregated residential sector forecasts. In the residential sector, the aggregated forecasts grow at an average of 2.3 percent annually compared to the staff forecast growth rate of 1.4 percent. Growth in residential demand is a function of the number of households and use per household. While staff's population projection has a higher growth rate than SCE's (Figure 3-4), SCE has faster growth in the number of households (Figure 3-5).

Figure 3-3: SCE Planning Area Residential Electricity Forecasts

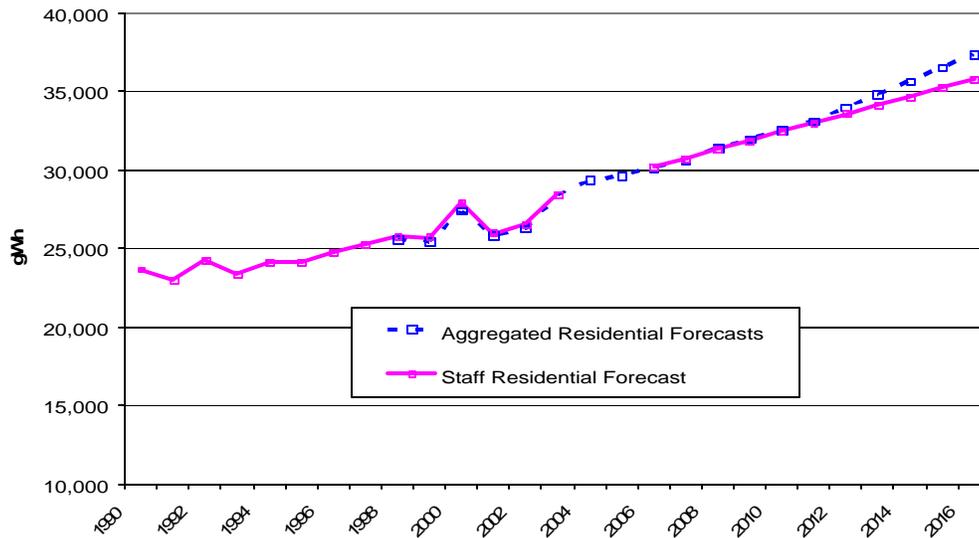


Figure 3-4: SCE Planning Area Population Forecasts

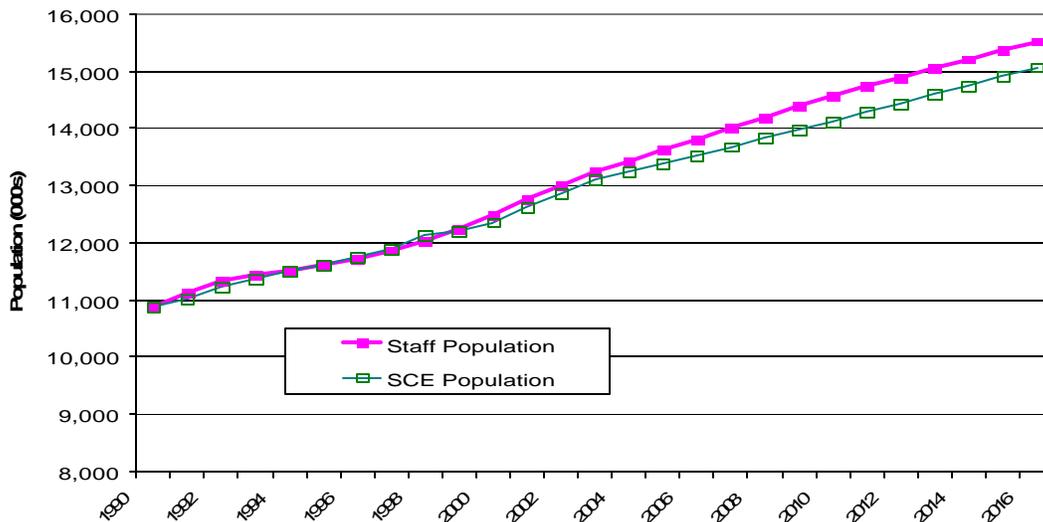
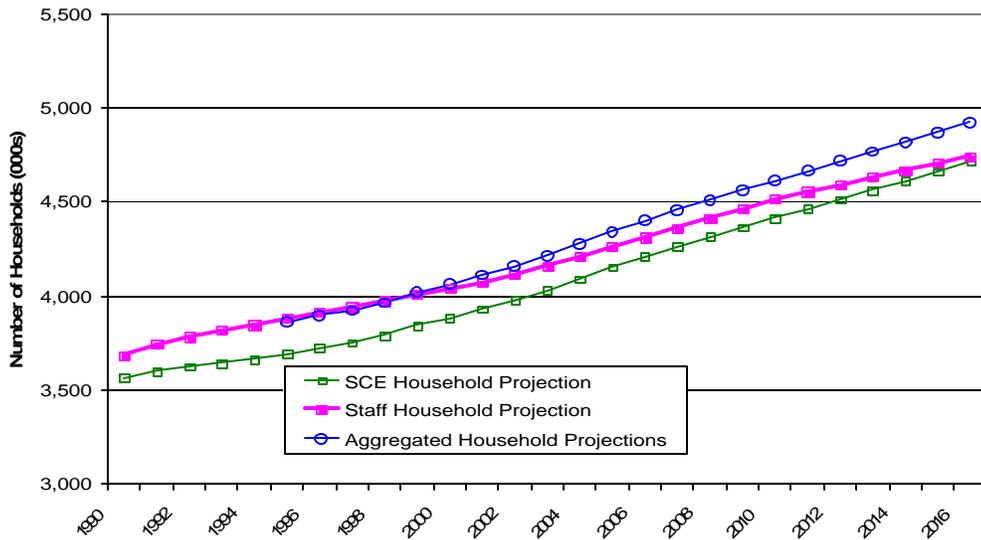
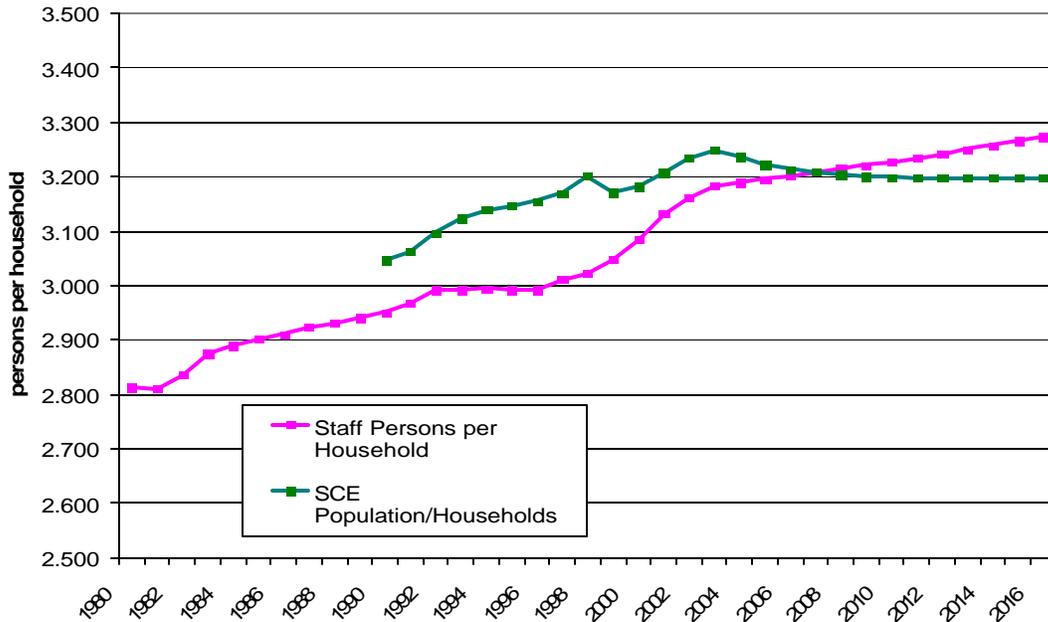


Figure 3-5: SCE Planning Area Household Projections



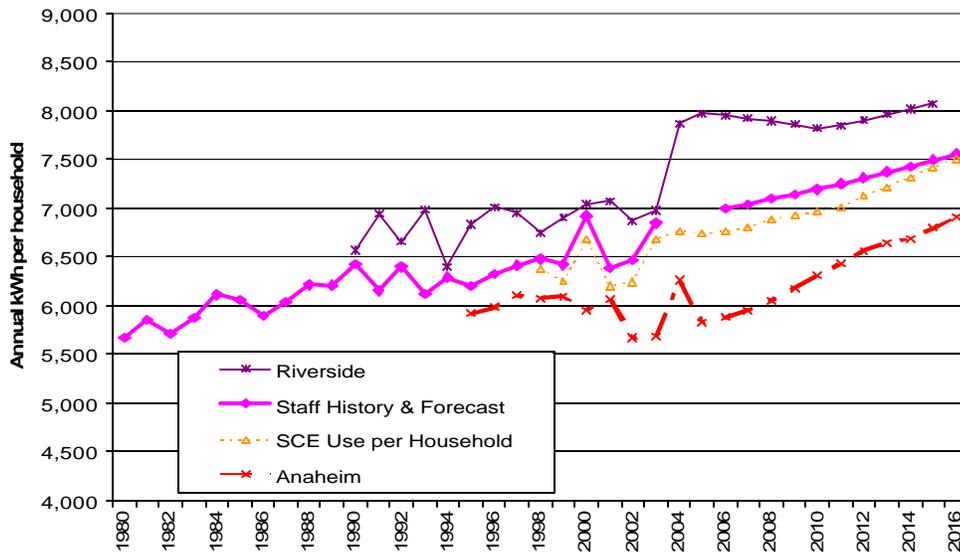
SCE did not provide their assumed persons per households variable explicitly, but it appears that they assume persons per household will decline for several years, then remain constant (Figure 3-6). By contrast, staff’s projections assume that persons per household will continue to increase, but at half the rate of the last decade.

Figure 3-6: SCE Planning Area Persons per Household



In addition to persons per household, other factors affecting electricity use per household are assumptions about personal income, retail electricity rates, and energy efficiency programs and standards. SCE's historic use per household trend is consistent with staff's (Figure 3-7), at a slightly lower level because more non-SCE customers in the planning area are in hotter areas. However, SCE's forecast assumes faster growth despite having fewer persons per household, with use per household increasing by over 800 kilowatt-hours (kWh) over the forecast period. Anaheim forecasts a similar trend. In the staff forecast annual use grows about 700 kWh per household over the forecast period, slightly faster than the increase over the last 10 years. This trend reflects a combination of rising personal income, decreasing electricity rates, and increasing persons per household.

Figure 3-7: SCE Planning Area Residential Electricity Use per Household (kWh)



The primary reason for SCE's faster growth in use per household appears to be growth in personal income. As Figure 3-8 shows, the SCE forecast has significantly greater growth in per capita income than staff's. This reflects the underlying assumption of faster growth in total personal income (as well as lower population growth), growing at an average rate of 3.7 percent (Figure 3-9). By comparison, the Economy.com personal income projection used by staff grows at 2.5 percent annually, still higher than the average annual growth rate of 2.2 percent since 1990.

Figure 3-8: SCE Planning Area per Capita Personal Income

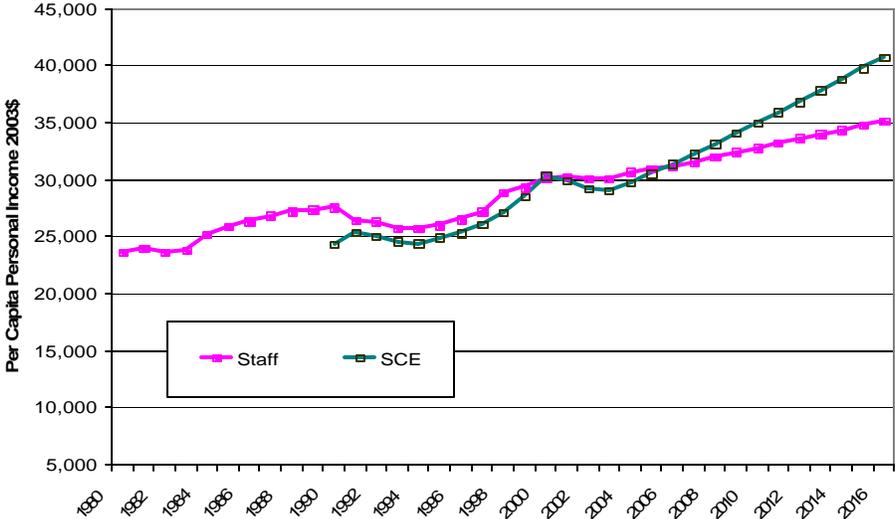
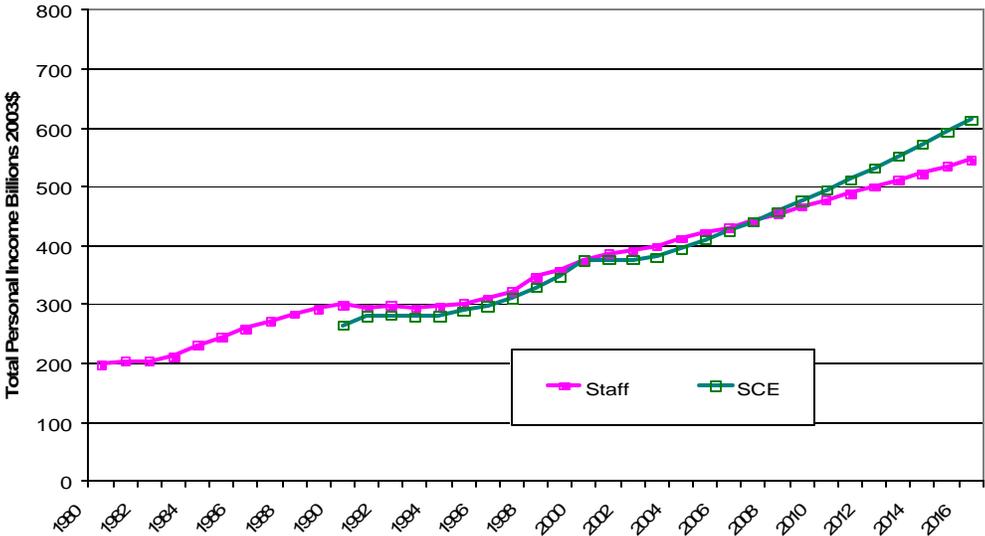


Figure 3-9: SCE Planning Area Total Personal Income



Commercial Sector Energy Forecasts

The greatest difference between the aggregated and staff forecasts is in the commercial sector, shown in Figure 3-10. The aggregated forecasts grow at an average of 3.1 percent annually over the forecast horizon compared to staff's 1.3 percent annual growth rate.

For SCE, this difference is caused by both faster growth of commercial floor space (Figure 3-11) and increasing energy use per square foot (Figure 3-12). SCE's electricity use per square foot increases, while staff's declines slightly because of the effects of building and appliance standards. SCE's forecast documentation makes no mention of accounting for the effects of changes in building standards. SCE forecasts commercial use per square foot as a function of commercial employment per square foot and electricity prices. Staff used SCE's commercial rate forecast, and SCE's projection of employment per square foot declines slightly over the forecast period. Therefore the main sources of the difference in use per square foot appear to be assumptions about the persistence of historical trends in use per square foot, and the effects of building standards. As noted in *California Energy Demand (CED) 2006-2016*, staff has updated its treatment of building standards and now assumes substantially greater impacts than included in earlier staff forecasts. Also, SCE has incorporated lower impacts from CPUC-funded energy efficiency programs than staff. Staff assumed that funding would increase to achieve the CPUC energy efficiency goals through 2008. SCE accounted for some of these impacts in its demand forecast, while a portion of the savings are counted as uncommitted and were reported in the supply forms submitted to the Energy Commission.

Figure 3-10: SCE Planning Area Commercial Sector Forecasts

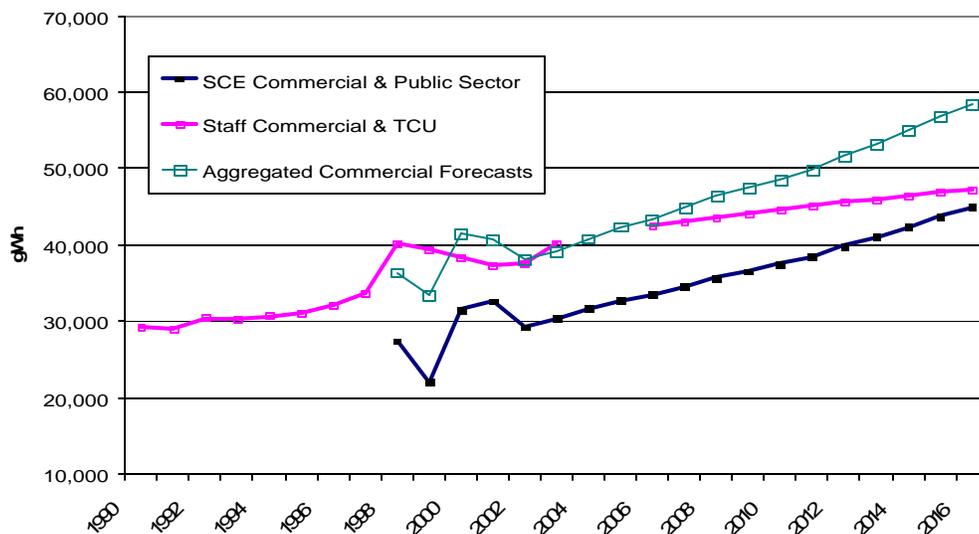


Figure 3-11: SCE Planning Area Commercial Floorspace Additions

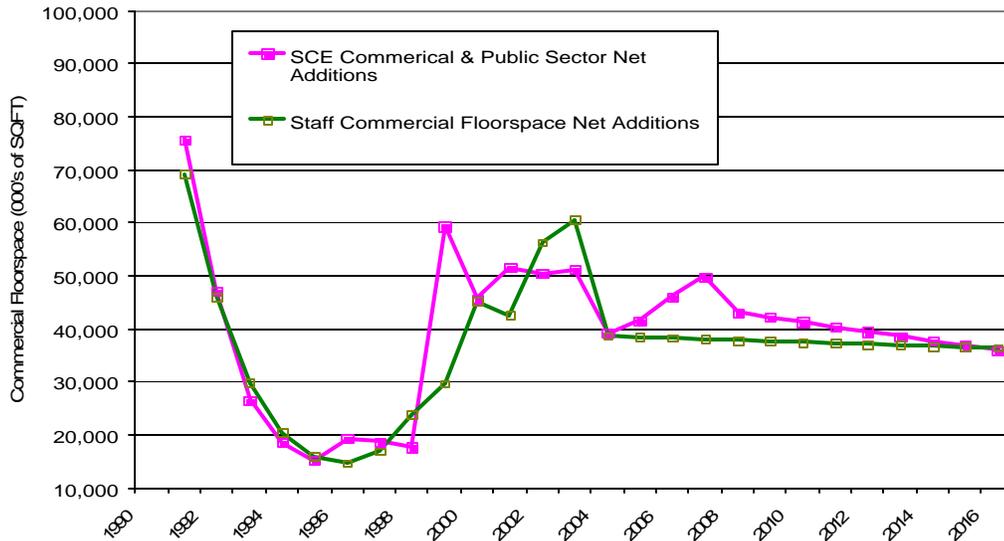
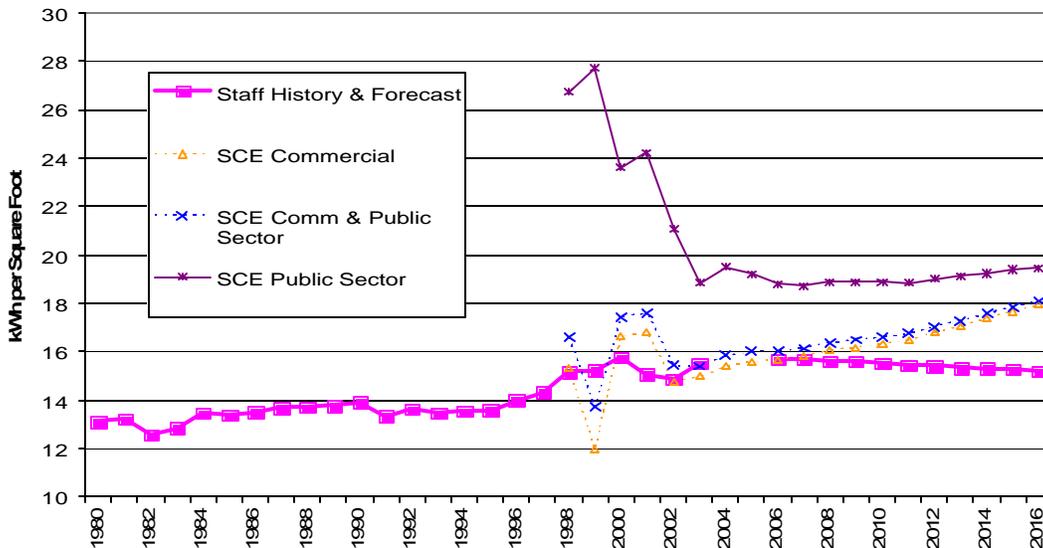


Figure 3-12: SCE Planning Area Commercial Building Electricity Use per Square Foot

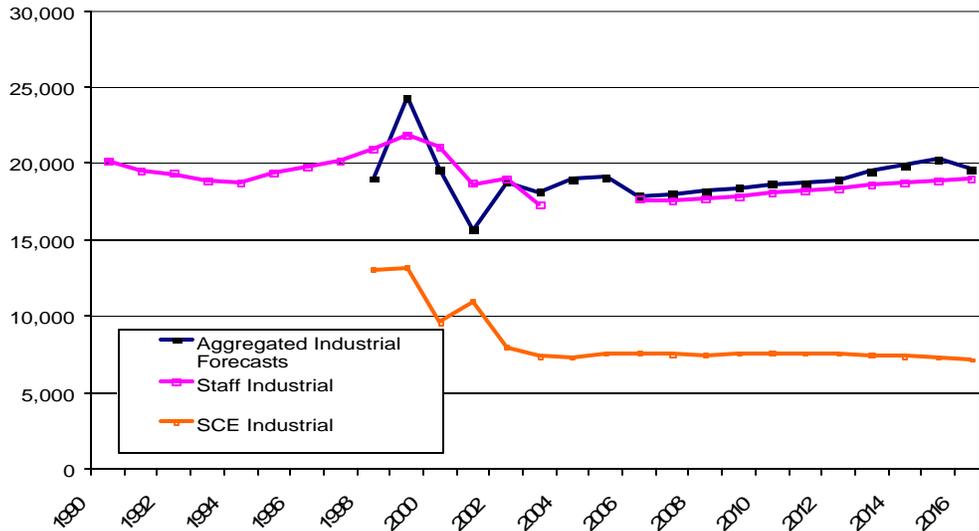


Industrial and Agriculture Sector Energy Forecasts

In aggregate, the staff forecasts and submitted forecasts are fairly close, with parties projecting slightly higher growth. SCE, however, projects a slight decline in industrial electricity use for bundled customers in their service area, as their projections of industrial employment and floor space decline. The economic projections used by SCE assume manufacturing employment will decline (Figure 2-13) at more than 1

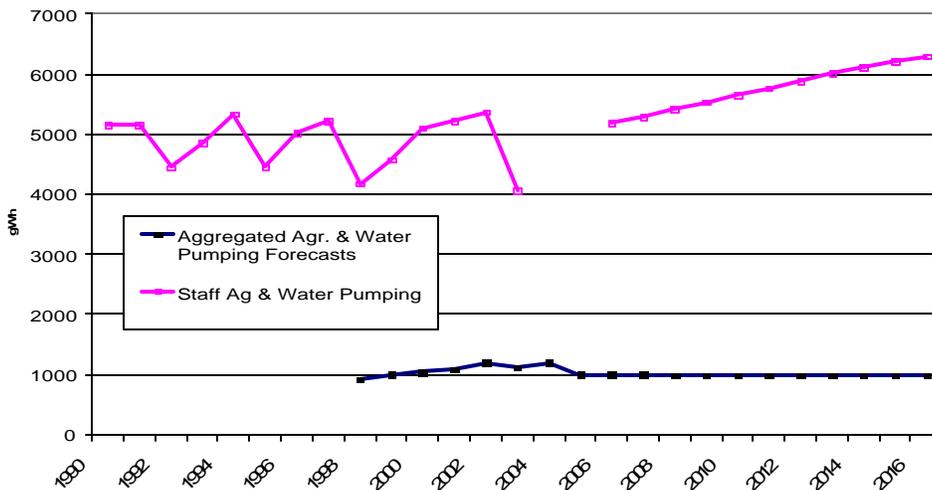
percent annually, while Economy.com projects a much slower rate of decline, with employment essentially staying at 2003 levels. Staff uses industrial value added as the economic driver, with use per dollar value added declining over time.

Figure 3-13: SCE Planning Area Industrial Sector Electricity Use



Most parties did not report agriculture or water pumping energy use separately; therefore the level of the aggregated forecasts shown in Figure 3-14 is not comparable to staff's. The utilities submitting these forecast all assumed constant load, while staff's forecast grows at about 2 percent annually from 2004 to 2016.

Figure 3-14: SCE Planning Area Agriculture and Water Pumping Electricity Use



Self-Generation

SCE's forecast of load served by self-generation grows by 4.5 percent annually (Figure 3-15), and its peak forecast grows at 5 percent. (Figure 3-16).³ The coincident peak grows by an average of 35 MW per year, while staff's grows about 10 MW per year. While both forecasts used recent data on new interconnections to develop a forecast, SCE's forecast does not appear to make any adjustment to account for the difference between the installed capacity of self-generation and the actual load reduction on system peak.

Figure 3-15: SCE Planning Area Self-Generation Energy Forecasts (gWh)

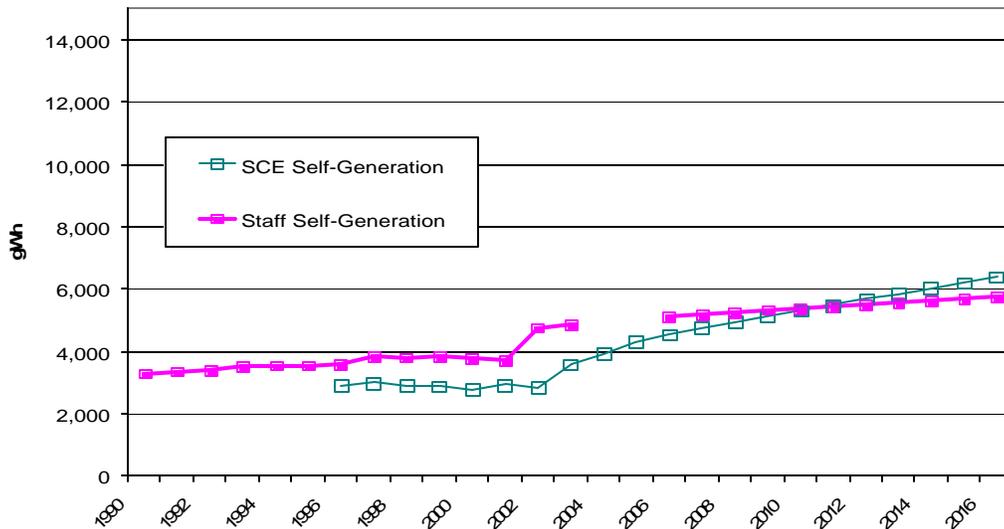
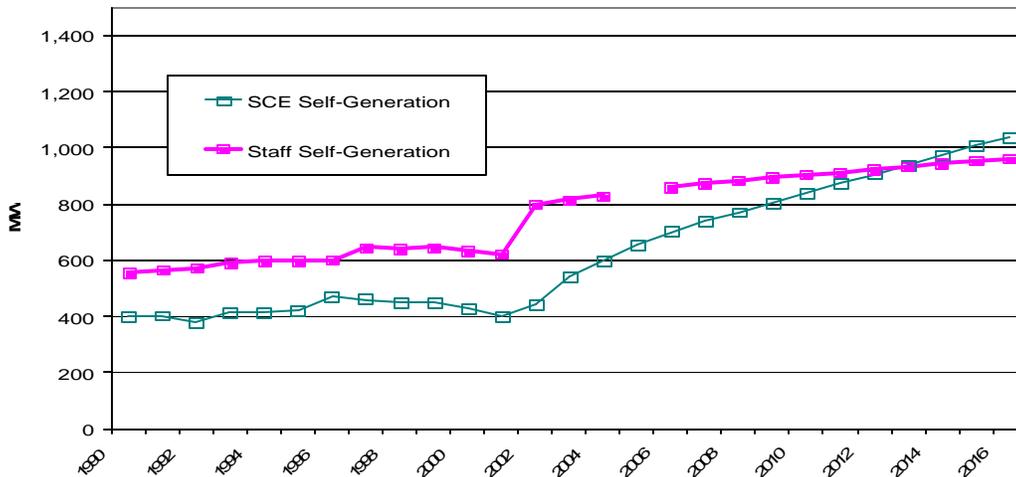


Figure 3-16: SCE Planning Area Self-Generation Coincident Peak Forecasts (MW)



CHAPTER 4

SAN DIEGO GAS & ELECTRIC PLANNING AREA

The San Diego Gas & Electric (SDG&E) planning area includes SDG&E bundled retail customers and customers served by various ESPs using the SDG&E distribution system to deliver electricity to end users. Direct access sales are about 18 percent of total sales in the SDG&E planning area. The five ESPs that submitted forecasts are 94 percent of total direct access sales in the SDG&E territory.

Table 4-1 compares staff's forecast with SDG&E's forecast for the planning area. Both SDG&E's peak and energy demand forecasts grow somewhat faster than the staff forecast. By 2016, SDG&E's energy use forecast is 4 percent higher than the staff forecast, and the SDG&E peak demand forecast is 5 percent higher than staff's forecast.

Table 4-1: Comparison of Forecasts for the SDG&E Planning Area

	Consumption (GWH)			Peak (MW)		
	SDG&E Service Area Forecast	Staff Forecast	% Difference	SDG&E Service Area Forecast	Staff Forecast	% Difference
1990	n/a	14,460		n/a	2,961	
2000	18,424	18,928	2.74%	3,485	3,472	-0.37%
2003	18,385	18,398	0.07%	3,902	3,921	0.48%
2008	20,626	20,405	-1.07%	4,468	4,350	-2.64%
2010	21,406	21,042	-1.70%	4,639	4,486	-3.30%
2013	22,575	21,981	-2.63%	4,889	4,686	-4.15%
2016	23,840	22,893	-3.97%	5,148	4,879	-5.22%
Annual Average Growth Rates						
1990-2000	n/a	2.73%		n/a	1.60%	
2000-2003	-0.07%	-0.94%		3.84%	4.14%	
2003-2008	2.33%	2.09%		2.75%	2.10%	
2003-2016	2.02%	1.70%		2.15%	1.70%	
Historic values are shaded						

Table 4-1 uses the projections of direct access load included by SDG&E in its forecast submittal. Figure 4-1 compares those projections to the aggregated forecasts of ESP energy sales (both submitted and staff-imputed), as well as staff's historical data and forecast for direct access sales. The historical data reported by the ESPs are higher than that reported to the Energy Commission by SDG&E for 2003 and 2004, yet their forecasts fall below that level immediately. Since this drop likely reflects expiring contracts that may be acquired by other ESPs or SDG&E, this chapter uses the SDG&E direct access projection to allow for more a meaningful planning area forecast comparison.

Figure 4-1: Direct Access Sales Forecast Comparisons

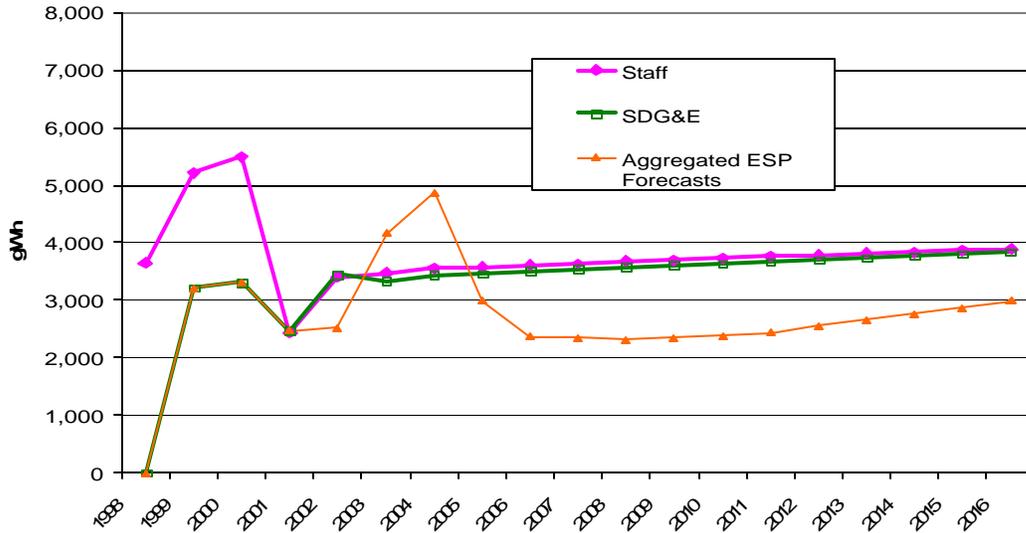


Figure 4-2 shows the components of the SDG&E energy forecast compared to the staff forecast. Figure 4-3 shows the SDG&E peak forecast compared to the staff forecast. SDG&E’s service peak forecasts grow at 2.15 percent annually, while the staff forecast grows at an average of 1.7 percent.

Figure 4-2: SDG&E Planning Area Electricity Sales Forecasts

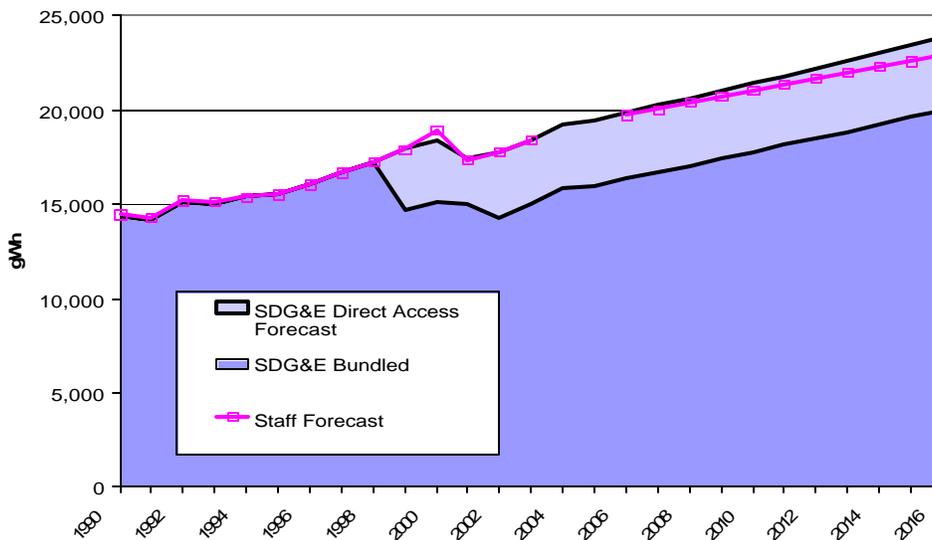
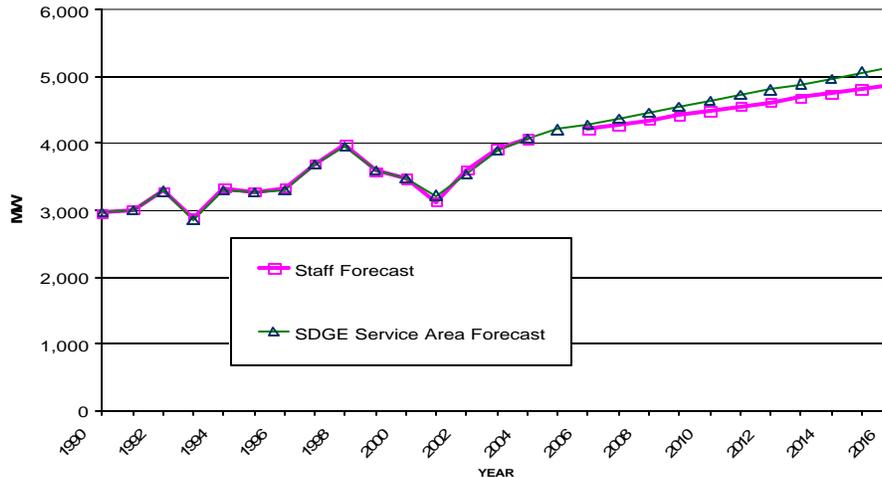


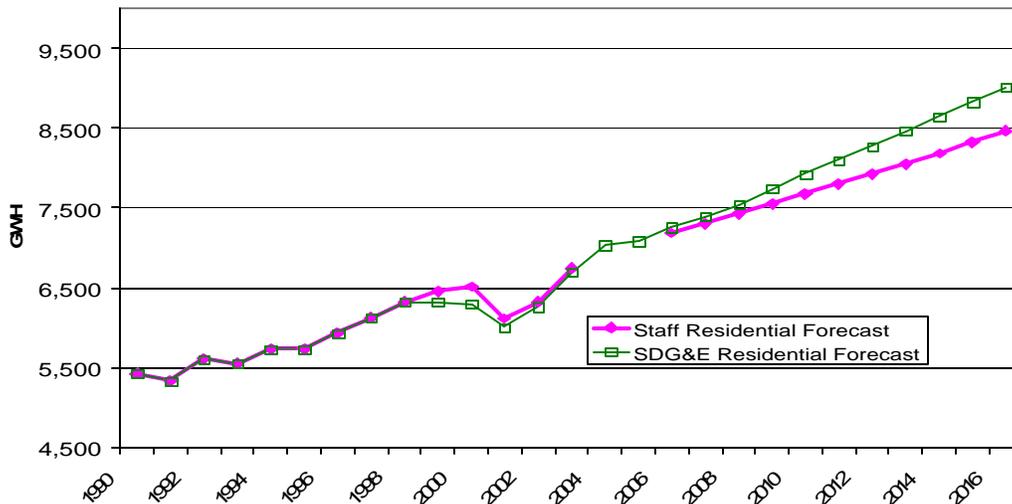
Figure 4-3: SDG&E Planning Area Peak Forecast Comparison



Residential Forecast Comparison

Figure 4-4 shows the staff forecast compared to the SDG&E residential sector forecast. SDG&E’s residential forecast grows at an average of 2.3 percent annually compared to the staff forecast growth rate of 1.8 percent. In SDG&E’s forecast residential demand grows faster in the second half of the forecast, while staff’s has a relatively constant growth rate.

Figure 4-4: SDG&E Planning Area Residential Electricity Forecasts



SDG&E forecasts residential electric sales as a function of the number of customers, electric prices, household income, home size, air-conditioning saturation, conservation impacts and other variables. Figure 4-5 compares the underlying population forecasts. Staff’s population projections include both San Diego County

and the SDG&E service area portion of Orange County. SDG&E's population projection is at a lower level which appears to represent San Diego County only. Also shown in Figure 4-5 is the population projection of the San Diego Association of Governments (SANDAG) ⁴, which has a slightly lower growth rate than the staff or SDG&E forecasts.

While staff's population projection has a similar growth rate to SDG&E's, SDG&E has faster growth in the number of households (Figure 4-6). SDG&E is using Global Insight's Fall 2004 economic and demographic projections which apparently assume decreasing persons per household, while staff's increase (Figure 4-7). By comparison, Figure 4-7 also includes the persons per household projection by SANDAG. The SANDAG projection is much closer to staff's views than that of SDG&E.

Figure 4-5: SDG&E Planning Area Population Projections

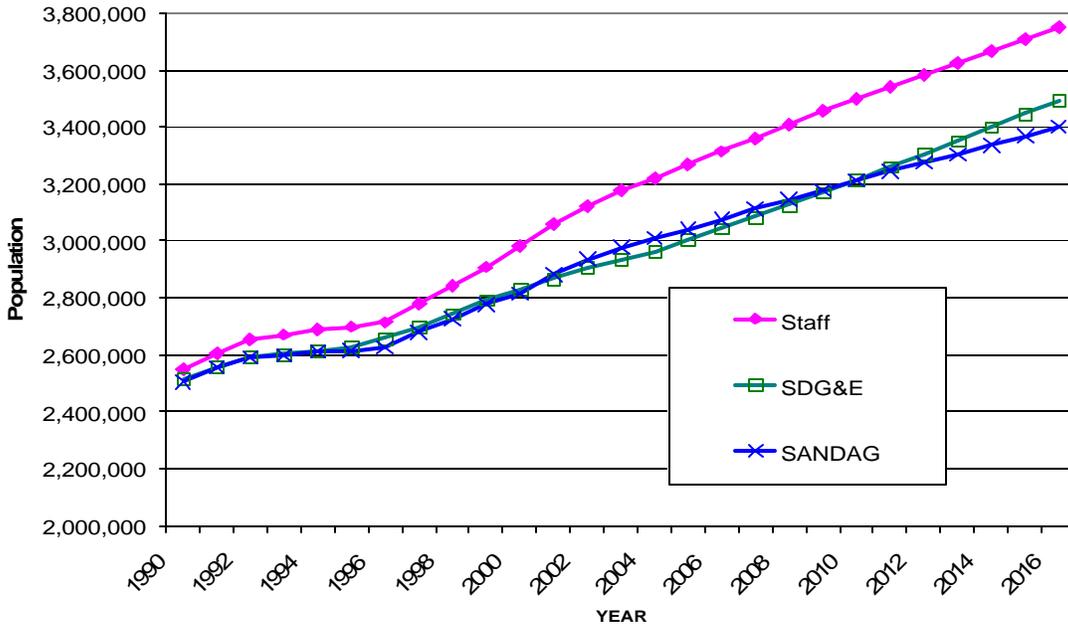


Figure 4-6: SDG&E Planning Area Household Projections

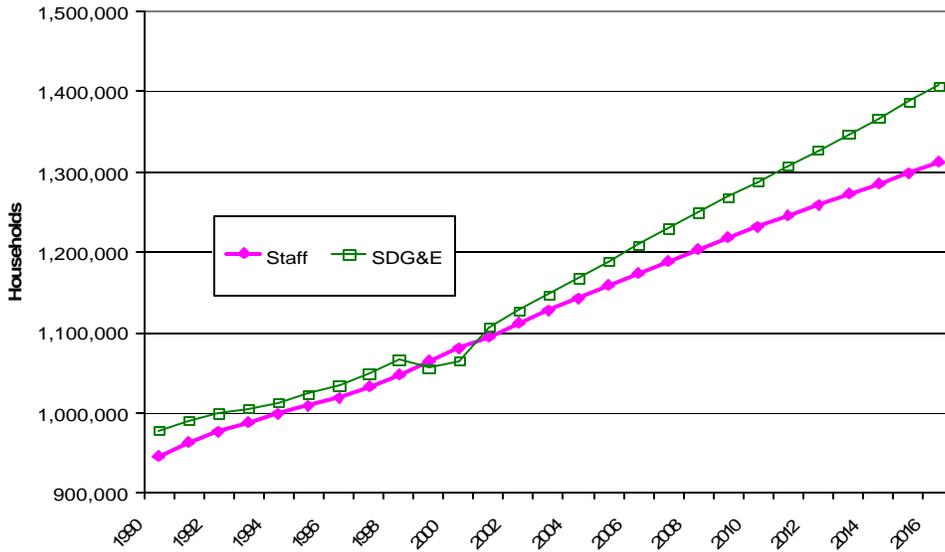
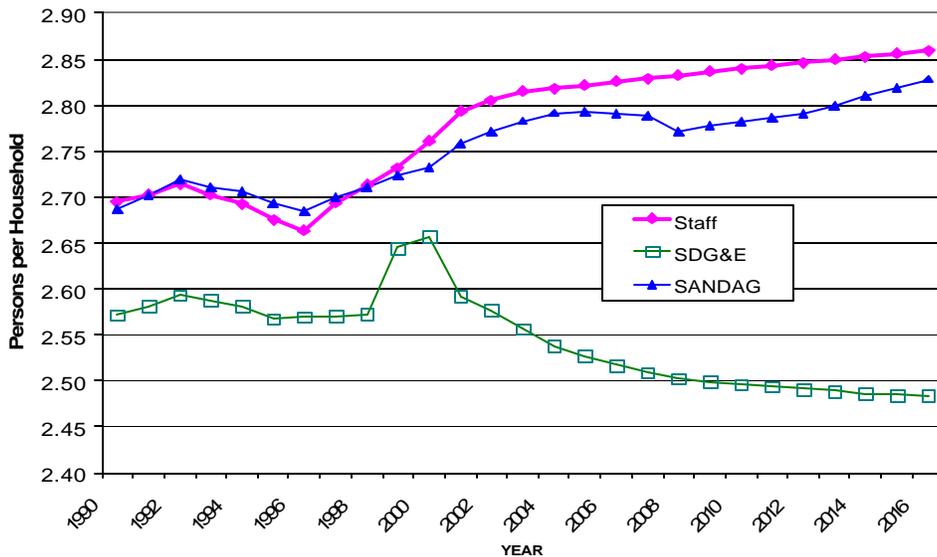
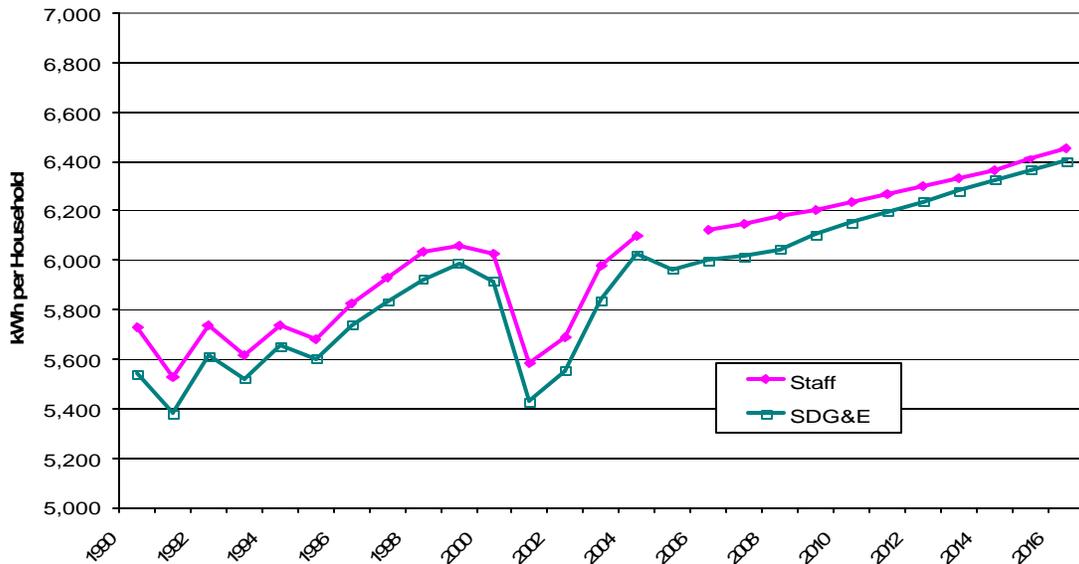


Figure 4-7: SDG&E Planning Area Persons per Household



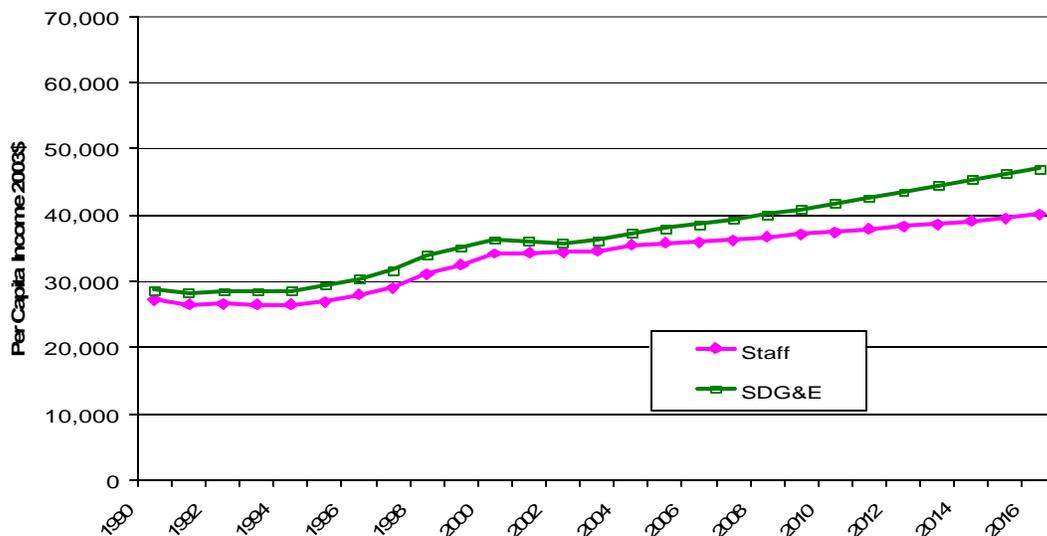
SDG&E’s historic use per household trend is consistent with staff’s (Figure 4-8), at a slightly lower level because staff assumes fewer households. However, SDG&E’s forecast assumes faster growth, especially post-2008. Both staff and SDG&E assumed declining electricity rates (although staff’s are at a higher level) and less conservation after 2008. The reasons for SDG&E’s faster growth in per-household electricity use are most likely growth in personal income and slowing in the rate of decline of persons per household.

Figure 4-8: SDG&E Planning Area Residential Electricity Use per Household (kWh)



As Figure 4-9 shows, the SDG&E forecast has greater growth in per capita income than staff's. SDG&E per capita income grows at 2 percent annually, compared to 1.1 percent used by staff. Since 1990 per capita income in San Diego has grown an average of 1.9 percent per year, thus SDG&E is essentially continuing the historic trend while staff assumes a slowdown.

Figure 4-9: SDG&E Planning Area per Capita Personal Income



Nonresidential Sector Energy Forecasts Comparisons

Figure 4-10 compares SDG&E and staff's nonresidential forecasts. The SDG&E forecast grows just slightly faster than staff's. SDG&E does not forecast industrial and commercial demand separately. The commercial sector is about two-thirds of nonresidential consumption. SDG&E did not provide its floor space stock history, so comparisons of use per square foot are not possible. However, most of the difference in forecasts is probably explained by the higher rate of commercial building assumed by SDG&E. As Figure 4-11 shows, SDG&E assumes about 16 million square feet of additions per year, while staff assumes 12 million per year. Staff additions are based on average annual additions over the last ten years, while SDG&E's correspond to the higher levels of building experienced in the last few years. SDG&E continued high level of additions seems optimistic given the cyclical nature of building trends.

Figure 4-10: SDG&E Planning Area Nonresidential Sector Forecasts

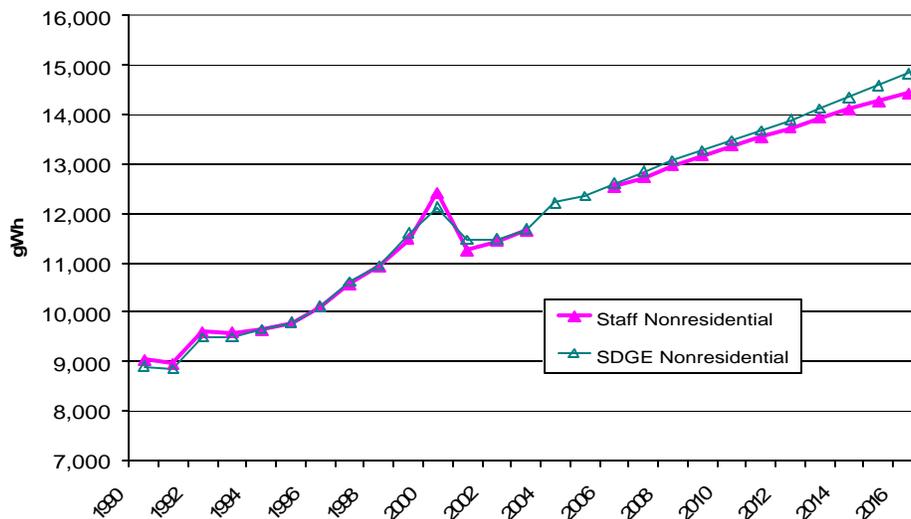
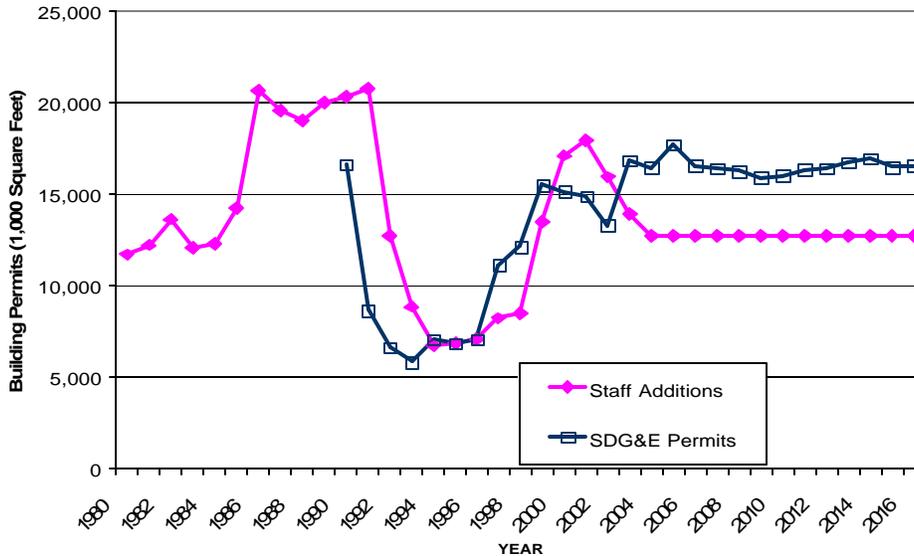


Figure 4-11: SDG&E Planning Area Commercial Floorspace Additions



Self-Generation

SDG&E’s forecast of load served by self-generation grows by 2 percent a nually (Figure 4-12), and its peak forecast grows at almost 3 percent. (Figure 4-13). Staff and SDG&E forecasts grow at similar rates after 2008. The major difference is in history; SDG&E historic self-generation energy data are similar to the data used in the demand forecast for the 2003 *Energy Report* (shown in Figure 4-12 as “CED 2003”). For the *CED 2006* forecast, staff has begun using data reported by the generators themselves rather than estimates provided by the utility. SDG&E has also has lower growth in energy from 2004 to 2007, while staff assumed higher capacity additions for the remaining life of the Self-Generation Incentives Program. In Figure 4-13, both forecasts add about 22 MW of coincident peak self-generation by 2010; after 2010 the SDG&E forecast grows faster than staff’s because SDG&E assumes a decreasing load factor over time.

Figure 4-12: SDG&E Planning Area Self-Generation Energy Forecasts (gWh)

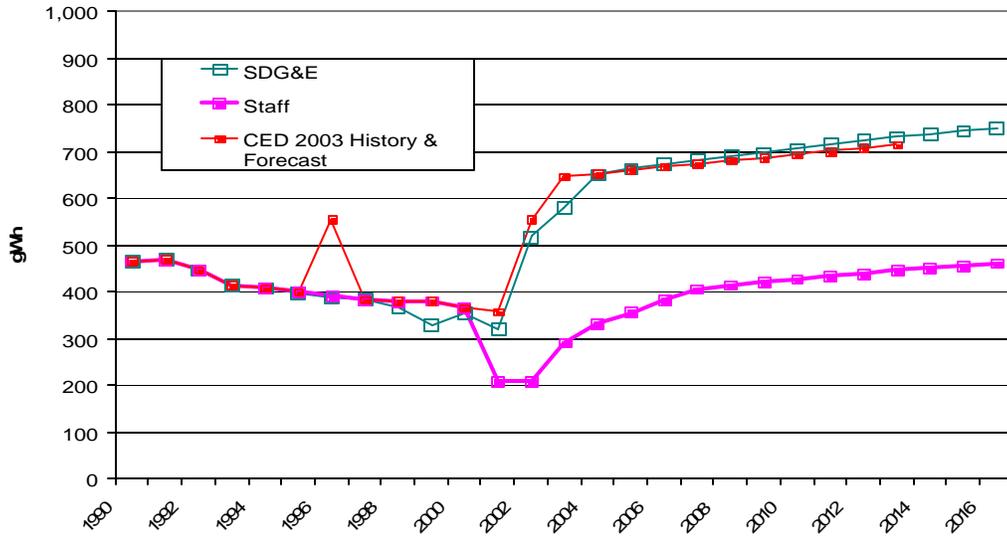
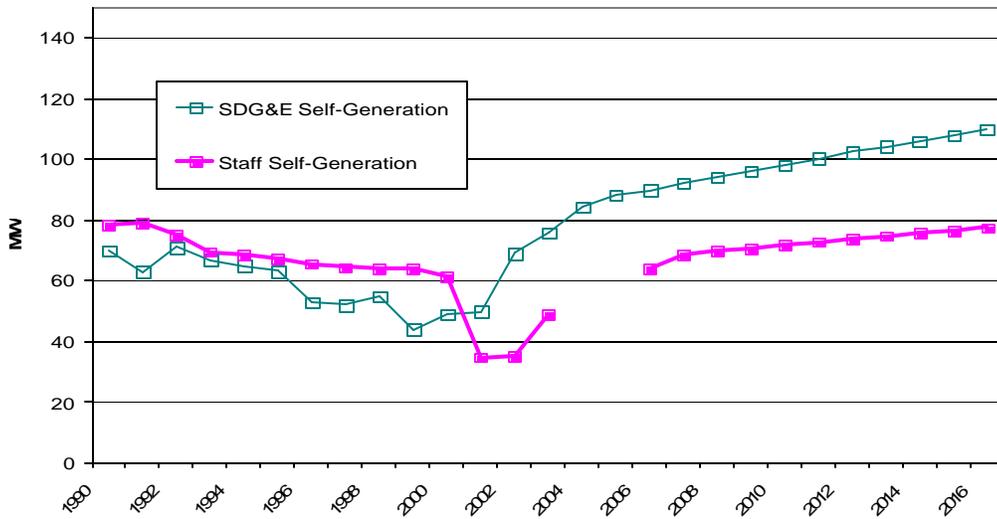


Figure 4-13: SDG&E Planning Area Self-Generation Coincident Peak Forecasts (MW)



CHAPTER 5

SACRAMENTO MUNICIPAL UTILITY DISTRICT PLANNING AREA

The Sacramento Municipal Utility District (SMUD) planning area includes SMUD retail customers. For the CED 2006 forecast, the SMUD planning area is confined to the existing SMUD service area focused on Sacramento and southern Placer County and does not take into account proposed expansions of the SMUD planning area into Yolo County. It also excludes Roseville, Redding, and WAPA, which are now part of the SMUD Control Area.

Table 5-1 provides a comparison of both SMUD and staff electricity consumption and peak forecasts for selected years. The staff and SMUD electricity consumption forecasts are in relative agreement through 2008. After that time the staff forecast grows at a more rapid rate than the SMUD forecast. This results in the staff electricity consumption forecast being approximately 3 percent higher than the SMUD forecast by 2013 and 4 percent higher in 2016. A similar pattern exists in the peak forecast comparison; however the SMUD peak forecast is approximately 1.5 percent higher than the staff forecast in 2008. By 2013 the staff forecast is 2 percent higher than the SMUD forecast. This difference increases to over 4 percent by 2016.

Table 5-1: Comparison of Forecasts for the SMUD Planning Area

	Consumption (GWH)				Peak (MW)		
	SMUD	Staff Forecast	%difference		SMUD	Staff Forecast	%difference
2000	9,568	9,491	-0.80%		2,688	2,693	0.19%
2003	9,924	9,924	0.00%		2,809	2,814	0.18%
2008	11,009	11,035	0.24%		3,143	3,097	-1.46%
2010	11,402	11,545	1.25%		3,268	3,251	-0.52%
2013	12,052	12,420	3.05%		3,450	3,524	2.14%
2016	12,744	13,275	4.17%		3,635	3,791	4.29%
Annual Average Growth Rates							
2000-2003	1.23%	1.50%			1.48%	1.48%	
2003-2008	2.10%	2.15%			2.27%	1.94%	
2003-2016	1.94%	2.26%			2.00%	2.32%	
Historic values are shaded							

Figure 5-1 provides a comparison between the staff and SMUD electricity sales forecasts. The staff forecast grows at a slightly faster rate than the SMUD forecast after 2008.

Figure 5-1: SMUD Planning Area: Electricity Sales Forecasts

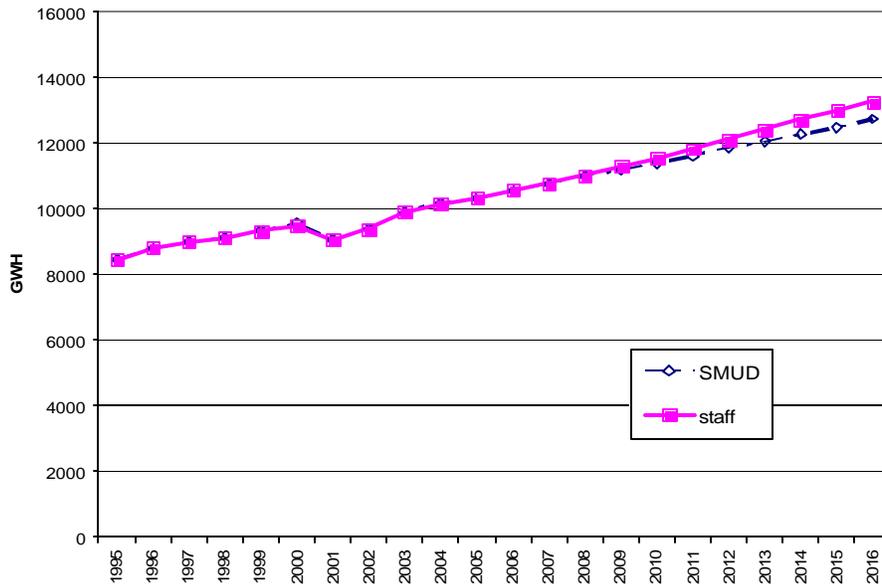
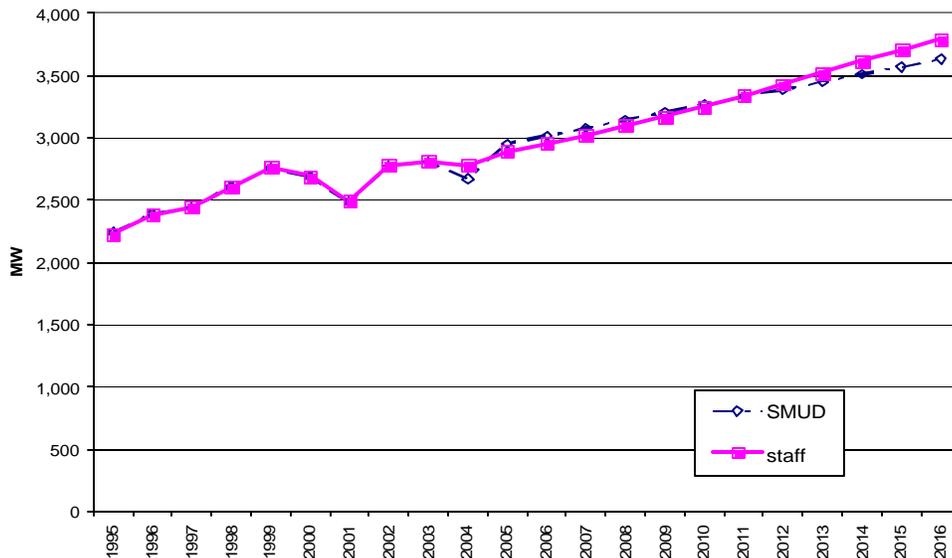


Figure 5-2 shows a comparison of the staff and SMUD peak forecasts. The SMUD forecast starts at a slightly higher level in 2006 and grows at a slower rate than the staff forecast. The result is a slightly higher staff forecast after 2010.

Figure 5-2: SMUD Planning Area Peak Forecast Comparison



Although the staff and SMUD forecasts are relatively close at the system level, there are greater differences at the sector level of detail. The staff has a higher residential sector forecast while SMUD has a higher nonresidential forecast. This may not

cause a concern from the standpoint of system requirements but may have an impact on implementation of efficiency and demand response programs.

Residential Forecast Comparison

Figure 5-3 shows the staff residential consumption forecast compared to SMUD residential sector forecasts. The staff residential forecast is higher throughout the entire forecast period than the SMUD residential forecast. This is due to differences in both household projections and assumptions about future use per household as described below.

Figure 5-3: SMUD Planning Area Residential Electricity Forecasts

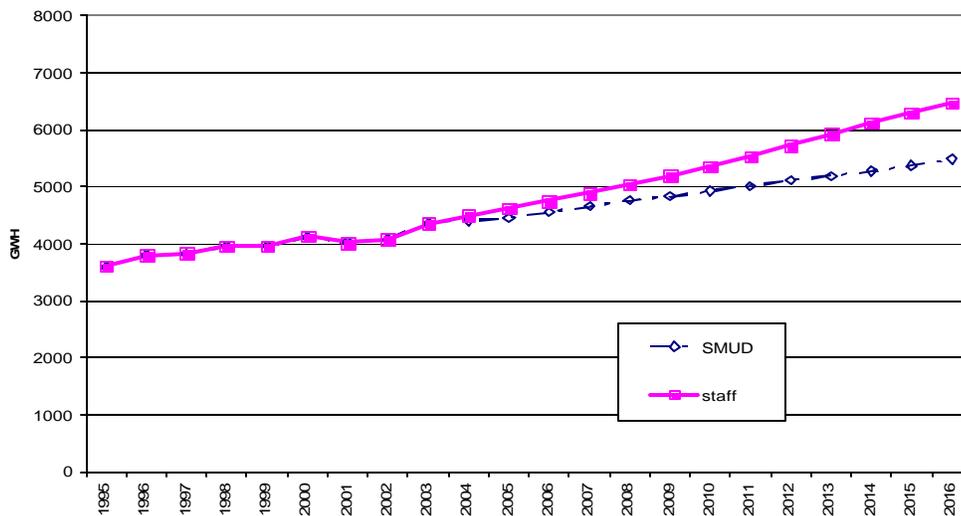


Figure 5-4 presents a comparison of the staff and SMUD household forecasts. Although the staff forecast grows at a slightly faster rate than the SMUD forecast the underlying assumptions of both forecasts are more divergent. Figure 5-4 also shows the much lower household projections of the Sacramento Area Council of Governments (SACOG).

Figure 5-4: SMUD Planning Area Household Forecasts

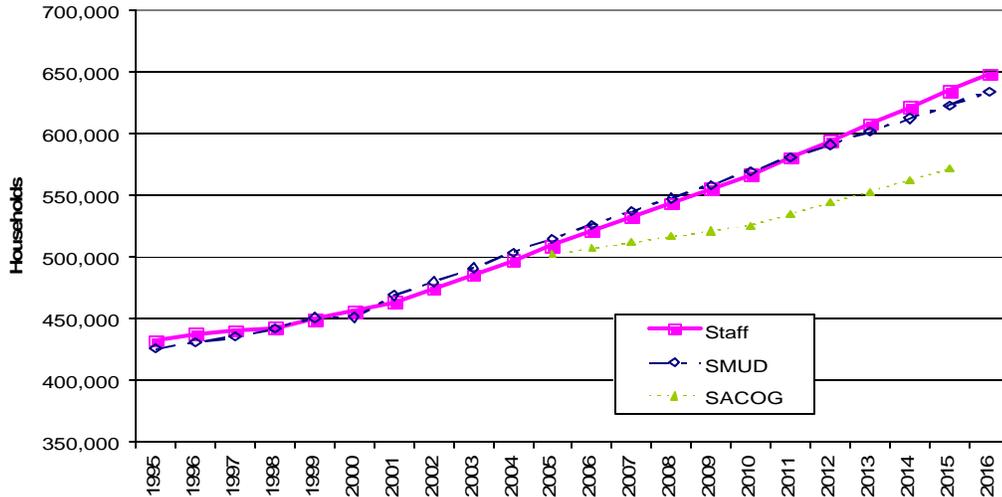
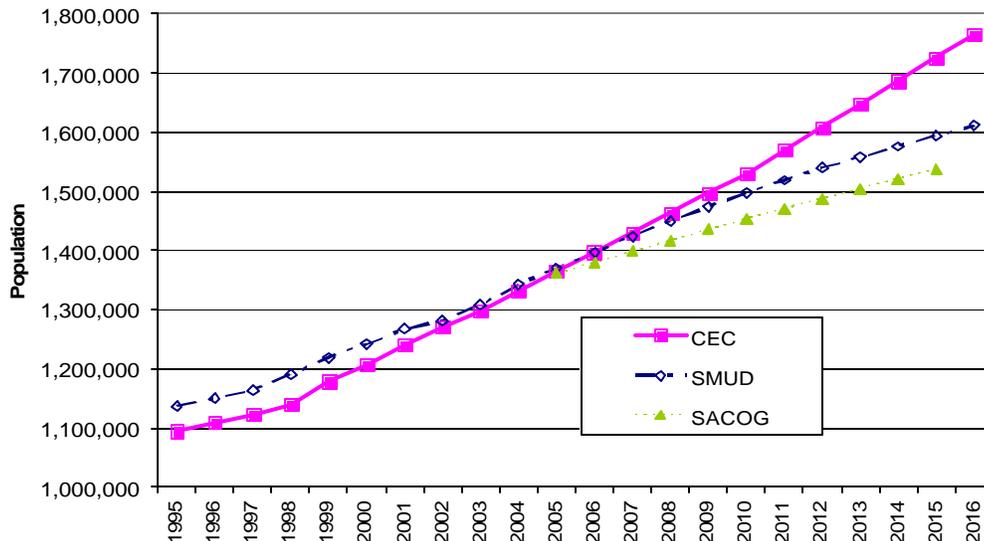


Figure 5-5 shows a comparison of the staff, SMUD and SACOG population forecasts. The staff population forecast grows at a much faster rate than the SMUD forecast after 2008, while SACOG’s projection grows at half the rate of staff’s. The staff population forecast is from the May 2004 DOF forecast and the SMUD projection is based on a Global Insight forecast.

Figure 5-5: SMUD Planning Area Population Forecasts



The higher staff assumption for growth in population is offset by the difference in persons per household forecasts, shown in Figure 5-6. The staff forecast assumes a continuation of the historic increase in persons per household although at a rate of

approximately half of that seen over the past decade. SACOG's persons per household projection initially increase faster than staff's, then declines. The SMUD forecast assumes a decline in persons per household over the forecast period consistent with previous Global Insight forecasts. These offsetting differences produce similar household forecasts, although the staff households contain greater persons per household. Staff cannot reconcile the differences in historical "facts" between the two sources. Given the extreme increase in Sacramento area housing prices in recent years, a steady decline seems less plausible.

Figure 5-6: SMUD Planning Area Persons per Household

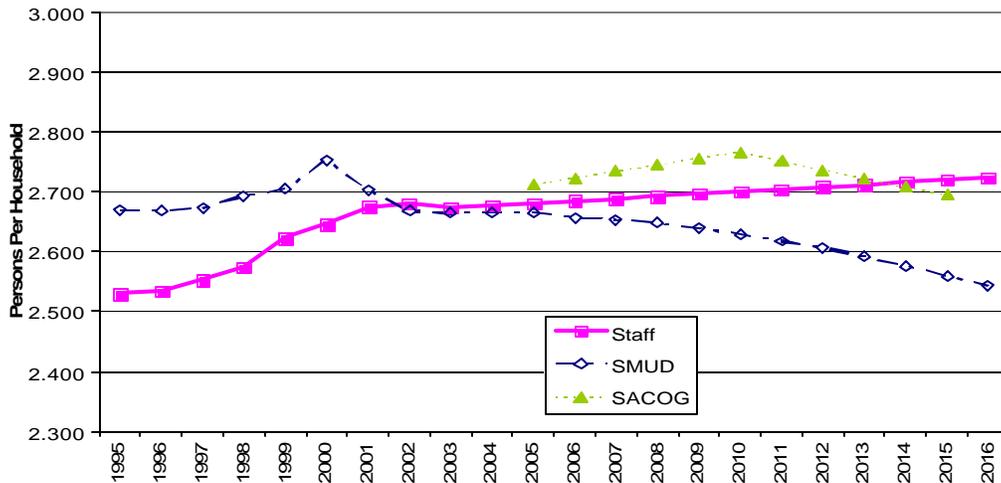


Figure 5-7 presents a comparison of the staff and SMUD household income forecast. The staff household income forecast is greater than the SMUD forecast, and the difference increases at a greater rate after 2008. This is primarily due to the difference in persons per household forecasts. These underlying differences combine to produce the respective use per household forecasts shown in Figure 5-8. The higher persons per household and household income values in the staff forecast produce a higher use per household in the staff forecast compared to the SMUD forecast.

Figure 5-7: SMUD Planning Area Household Income

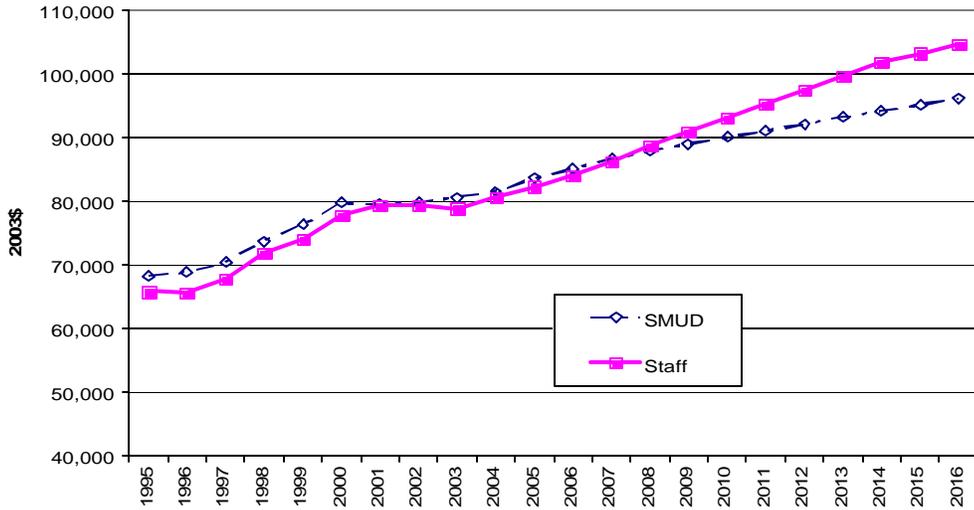
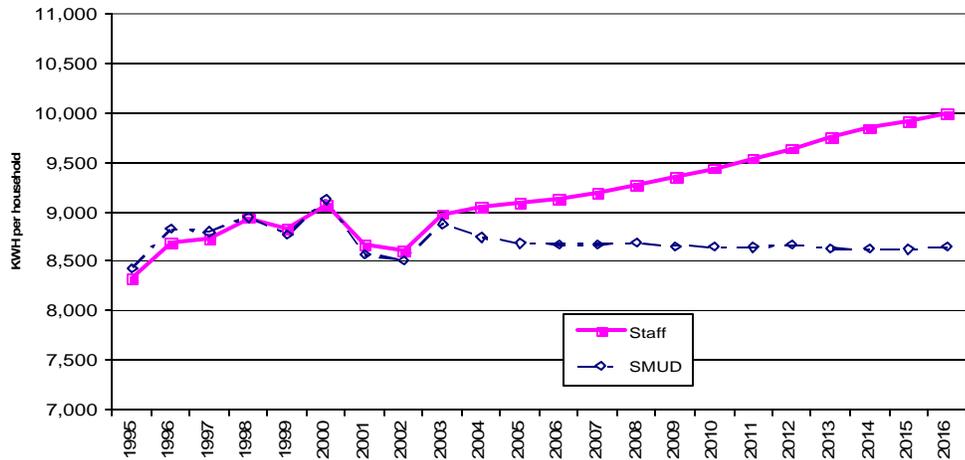


Figure 5-8: SMUD Planning Area Residential Electricity Use per Residential Unit (kWh)



Nonresidential Forecast Comparisons

Figure 5-9 presents a comparison of the SMUD planning area nonresidential forecasts. SMUD submitted its forecast by rate class; thus, there is no way to compare the forecasts at a sector-specific level of detail. The SMUD nonresidential forecast is higher throughout the forecast period than the staff forecast. This higher nonresidential forecast serves to offset the higher staff residential forecast.

Figure 5-9: SMUD Planning Area Non-Residential Forecasts

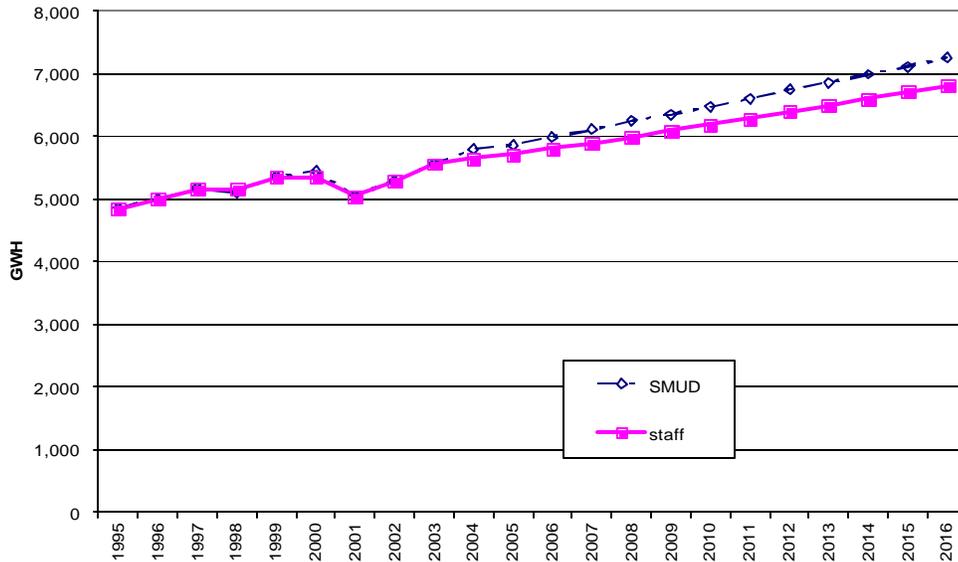


Figure 5-10 compares the staff and SMUD commercial floorspace forecasts. SMUD's electricity sales model is driven by number of accounts, as well as climate characteristics. Commercial floorspace and other economic and demographic variables are apparently used to project number of accounts. SMUD's floorspace projection has a lower rate than staff's, so this does not explain the difference in forecasts. Figure 5-11 compares electricity use per square foot. SMUD's use per square foot increases steadily over the forecast period, while staff's declines slightly. SMUD notes in its documentation that it does not attempt to account for price effects, changes in end use efficiencies or saturations, or building trends. Since the staff usage rate reflects the effects of building standards and changes in the building stock, this seems to explain why the staff forecast is lower.

Figure 5-10: SMUD Planning Area Commercial Building Floorspace

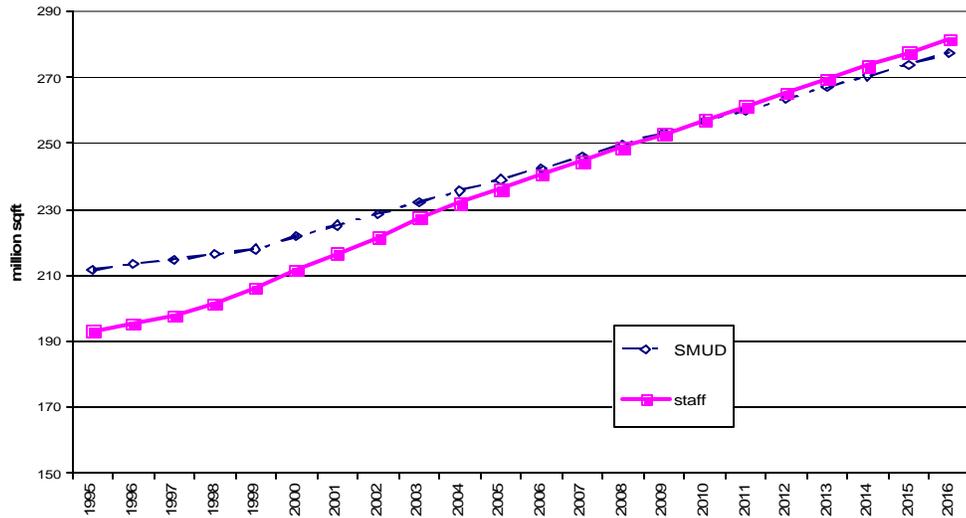
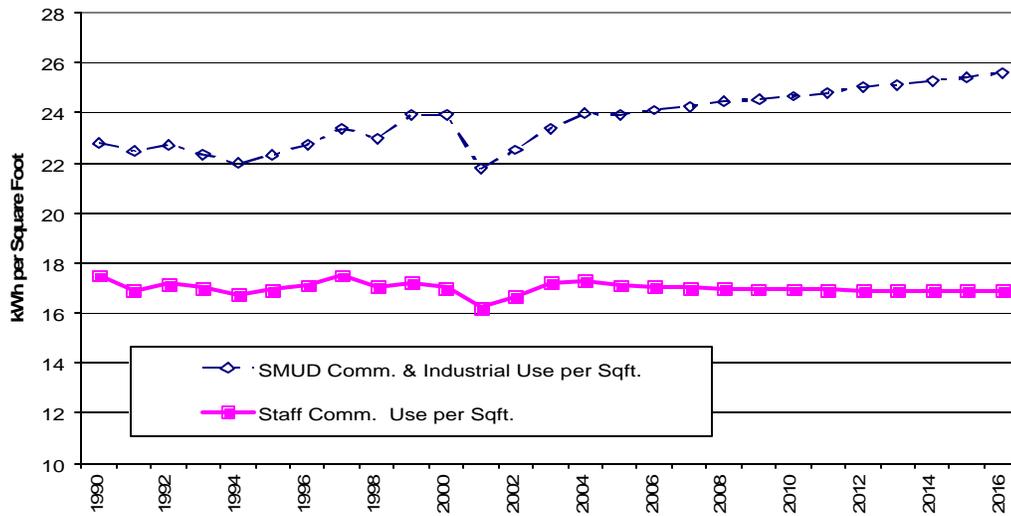


Figure 5-11: SMUD Planning Area Commercial Building Electricity Use per Square Foot



CHAPTER 6

LOS ANGELES DEPARTMENT OF WATER AND POWER PLANNING AREA

The Los Angeles Department of Water and Power (LADWP) planning area includes LADWP bundled retail customers and customers served by any energy service providers (ESPs) using the LADWP distribution system to deliver electricity to end-users.

Table 6-1 provides a comparison of both LADWP and staff electricity consumption and peak forecasts for selected years. Both the LADWP electricity consumption and peak forecasts grow faster than corresponding staff forecasts. The annual growth rate of the staff electricity consumption forecast is 0.8 percent compared to 1.7 percent for the LADWP forecast over the 2003-2008 time period. This annual difference in growth of 0.9 percent continues throughout the forecast period. The 2003-2016 staff annual electricity growth is 0.5 percent compared to 1.4 percent for the LADWP forecast. Adjusting to the discrepancy is not yet resolved 2003 base year energy consumption, the staff electricity forecast is about 6 percent lower than the LADWP forecast by 2010 and almost 12 percent lower by 2016. Forecast differences are similar for the peak forecasts. The LADWP peak forecast grows at a faster rate than the staff forecast over the entire forecast period. By 2010 the LADWP peak forecast is almost 4 percent higher than the staff forecast and it is almost 9 percent higher than the staff forecast by the end of the forecast period.

Table 6-1: Comparison of Forecasts for the LADWP Planning Area

	Consumption (GWH)				Peak (MW)		
	LADWP	Staff Forecast	%difference		LADWP	Staff Forecast	%difference
2000	22,897	23,296	1.74%	5,299	5,330	0.59%	
2003	23,041	24,285	5.40%	5,410	5,378	-0.59%	
2008	25,047	25,296	0.99%	5,798	5,701	-1.67%	
2010	25,828	25,505	-1.25%	5,977	5,744	-3.90%	
2013	26,762	25,752	-3.77%	6,205	5,795	-6.61%	
2016	27,674	25,969	-6.16%	6,416	5,841	-8.96%	
Annual Average Growth Rates							
2000-2003	0.21%	1.40%		0.69%	0.30%		
2003-2008	1.68%	0.82%		1.39%	1.17%		
2003-2016	1.42%	0.52%		1.32%	0.64%		
Historic values are shaded							

Figure 6-1 provides a visual comparison of the differences between the staff and LADWP electricity forecasts. It appears that there is a need to resolve the historic electricity sales numbers.⁵ Both the staff and LADWP forecasts have similar growth in the early part of the forecast. The staff forecast flattens out after 2008 due to lower population growth assumptions and impacts of building and appliance standards, while the LADWP forecast continues growing at a relatively constant rate.

Figure 6-1: LADWP Planning Area: Electricity Sales Forecasts

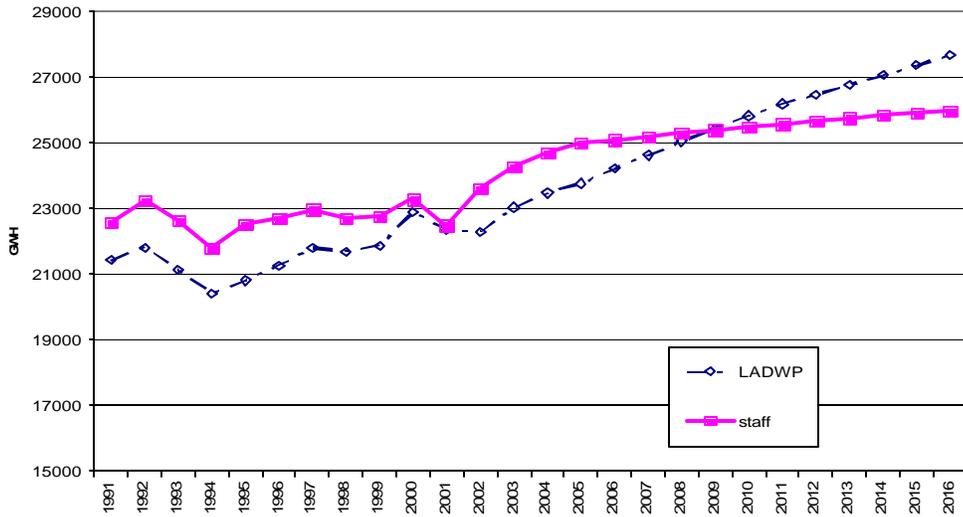
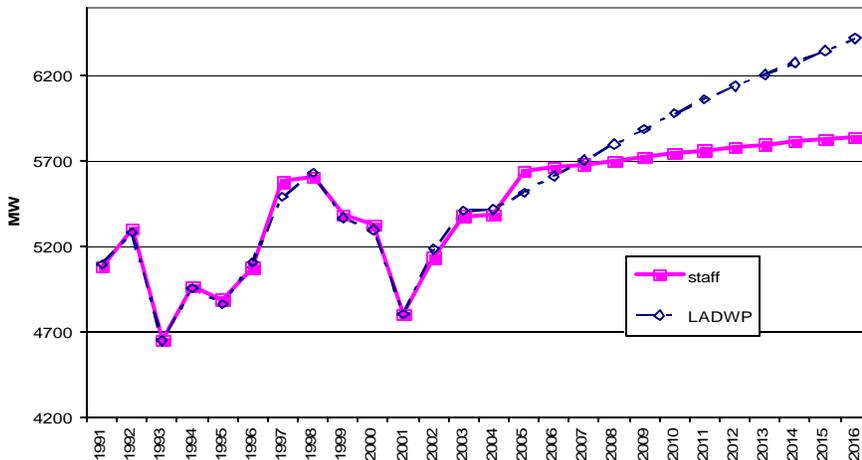


Figure 6-2 shows a comparison of the staff and LADWP peak forecasts. Differences in the forecast are primarily driven by the underlying electricity forecast differences. The fact that there is much closer agreement on the historic peak values creates a greater difference in the resulting peak demand forecasts with the LADWP forecast being higher than the staff forecast over the entire forecast period.

Figure 6-2: LADWP Planning Area Peak Forecast Comparison



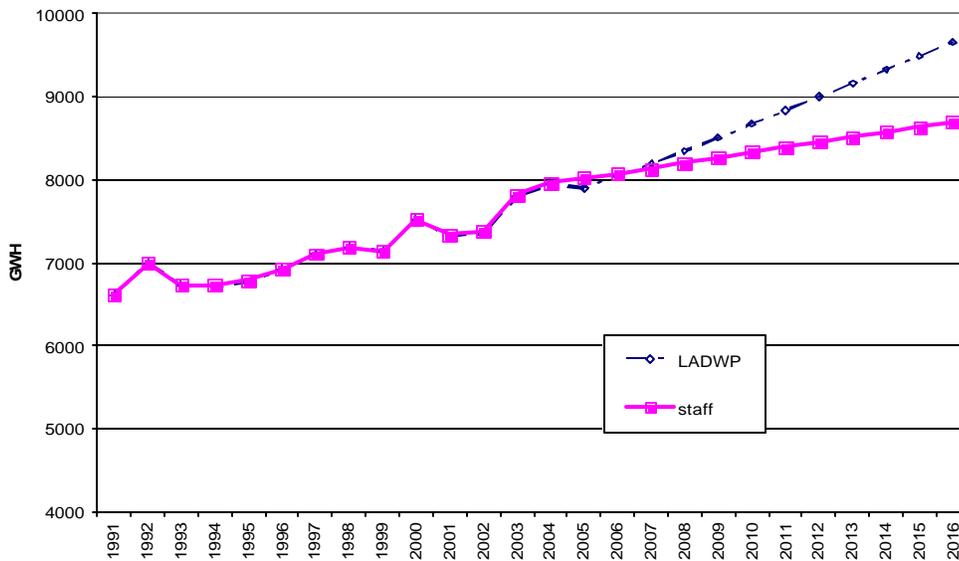
LADWP did not provide any specific annual detail on forecast drivers used for their sector forecast so the only comparisons available are at total sector energy levels. Differences in the underlying sector forecast assumptions are speculative.

Residential Forecast Comparison

Figure 6-3 shows the staff residential consumption forecast compared to the LADWP residential sector forecast. The LADWP residential forecast is higher throughout the entire forecast period than the staff residential forecast. LADWP reported using the UCLA Anderson School of Business Forecast for their population forecast. This forecast is known to be higher than the DOF forecast at the statewide level, so it is assumed that part of the residential forecast difference is due to the way in which LADWP used the UCLA projections in combination with the underlying population and household trends for the City of Los Angeles.

Another factor that may lead to a lower staff forecast is the inclusion of the most recent rounds of building and appliance standards. The LADWP forecast documentation makes no mention of inclusion of recent or future building or appliance standards in their residential forecast.

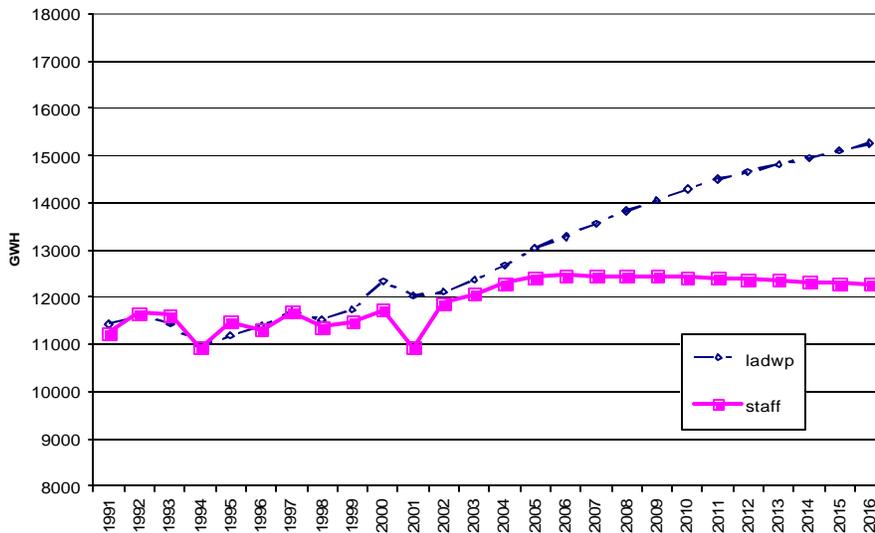
Figure 6-3: LADWP Planning Area Residential Electricity Forecasts



Commercial Sector Forecast Comparison

Figure 6-4 presents a comparison of the staff and LADWP commercial forecasts. As noted in CED 2006, Staff's assumed rate of growth of floorspace is actually greater in this forecast than in the CED 2003 forecast. Use per square foot declines in the staff forecast beginning in 2006 due to inclusion of the 2005 nonresidential building standards. Staff's assessment of these building standard impacts may contribute to some of the forecast difference.

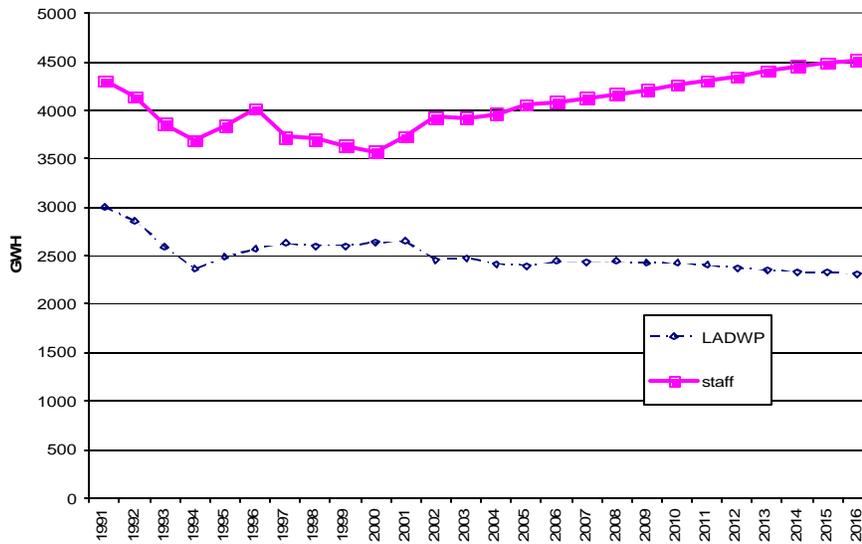
Figure 6-4: LADWP Planning Area Commercial Forecasts



Industrial Sector Comparison

Figure 6-5 presents a comparison of the staff and LADWP industrial forecasts. The LADWP forecast projects a continuation of the decline in industrial employment. The staff forecast is based on projections of value added in the Los Angeles basin which are projected to increase slightly over the forecast period. The portion of this industrial activity that takes place in City of Los Angeles versus Southern California Edison service area or that of the various other POU's is a complex matter of local energy price differentials and numerous decisions by industrial companies about the merits of specific sites for their business activities.

Figure 6-5: LADWP Planning Area Industrial Forecasts



CHAPTER 7

BGP ELECTRIC PLANNING AREA

The Burbank, Glendale, and Pasadena (BGP) planning area includes the retail customers of the three separate publicly owned electric utilities which serve the cities of Burbank, Glendale, and Pasadena. Staff forecasts the sum of these three utility loads as a single utility planning area.

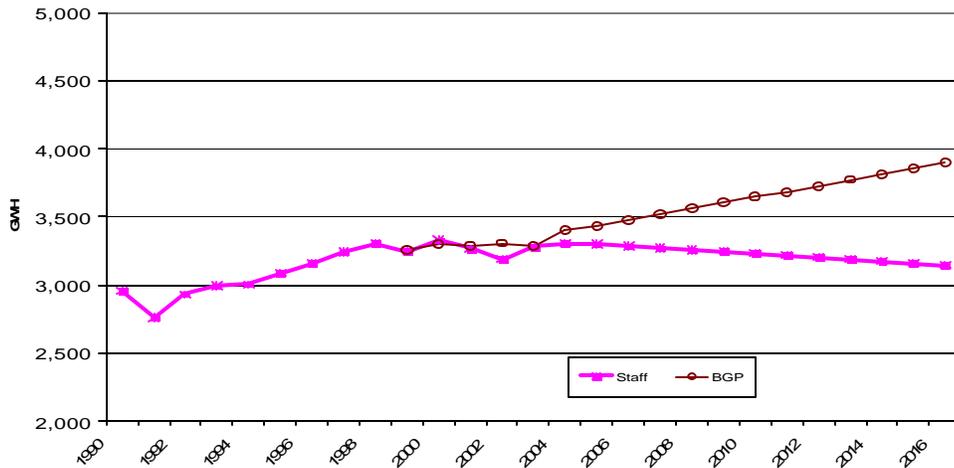
Table 7-1 compares staff’s forecast for the planning area with the aggregated forecasts of the three utilities. The POU’s projected consumption grows from 2003 to 2016 at an annual rate of 1.3 percent while staff projects a -0.3 percent growth rate for the same period. By 2016, the POU’s energy use forecast is almost 20 percent higher than the staff forecast. A peak forecast was provided on Form 1.3 or 1.4 by only Glendale and Pasadena, so the levels of the peak forecasts are not comparable. Staff’s peak forecast is essentially constant, while the sum of the Glendale and Burbank forecasts grows at 1 percent annually.

Table 7-1: Comparison of Forecasts for the BGP Planning Area

	Consumption (GWH)			Peak (MW)		
	Aggregated Forecasts	Staff Forecast	Percent Difference	Aggregated Forecasts	Staff Forecast	Percent Difference
1990	n/a	2,955		n/a	773	
2000	3,296	3,331	1.04 %	559	785	40.43 %
2003	3,283	3,283	-0.02 %	560	794	41.71 %
2008	3,557	3,257	-8.44 %	591	818	38.42 %
2010	3,644	3,235	-11.22 %	602	812	34.96 %
2013	3,774	3,189	-15.50 %	618	801	29.62 %
2016	3,899	3,146	-19.30 %	636	792	24.53 %
Annual Average Growth Rates						
1990-2000	n/a	1.20 %		n/a	0.15 %	
2000-2003	-0.13 %	-0.48 %		0.06 %	0.36 %	
2003-2008	1.62 %	-0.16 %		1.08 %	0.60 %	
2003-2016	1.33 %	-0.33 %		0.98 %	-0.02 %	
Historic values are shaded						

Figure 7-1 shows the POU energy forecast compared to the staff forecast. A complete history of BGP consumption was not provided for years prior to 1999. Staff’s record of consumption from 1990 is presented to provide historical perspective.

Figure 7-1: BGP Planning Area Electricity Sales Forecasts



Figures 7-2 and 7-3 compare the POU's and staff's residential and nonresidential energy forecasts, respectively. The bulk of the difference in the two forecasts is in the nonresidential sector. About 19.5 percent, or just under 150 gWh, of the difference between the forecasts is in the residential sector. The remaining 600 gWh is in the nonresidential sector. (Pasadena did not forecast the industrial sector separately, so comparisons at a level of detail below nonresidential are not possible.) In both the residential and nonresidential sectors, staff assumes growth in consumption is slowed by the 2001 and 2005 building and appliance efficiency standards. The documentation submitted by these utilities does not indicate whether the effects of building standards are accounted for in their forecasts.

Figure 7-2: BGP Planning Area Residential Sales Forecast

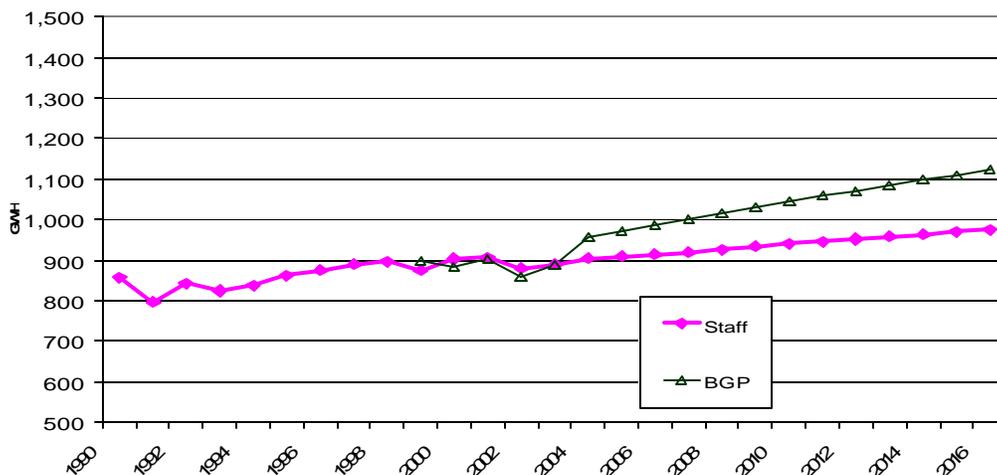


Figure 7-3: BGP Planning Area Nonresidential Sales Forecast

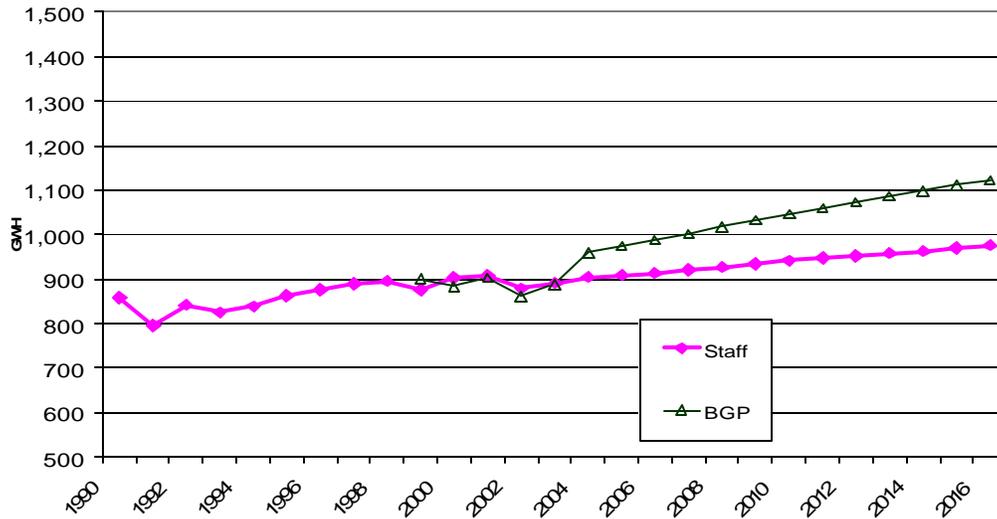
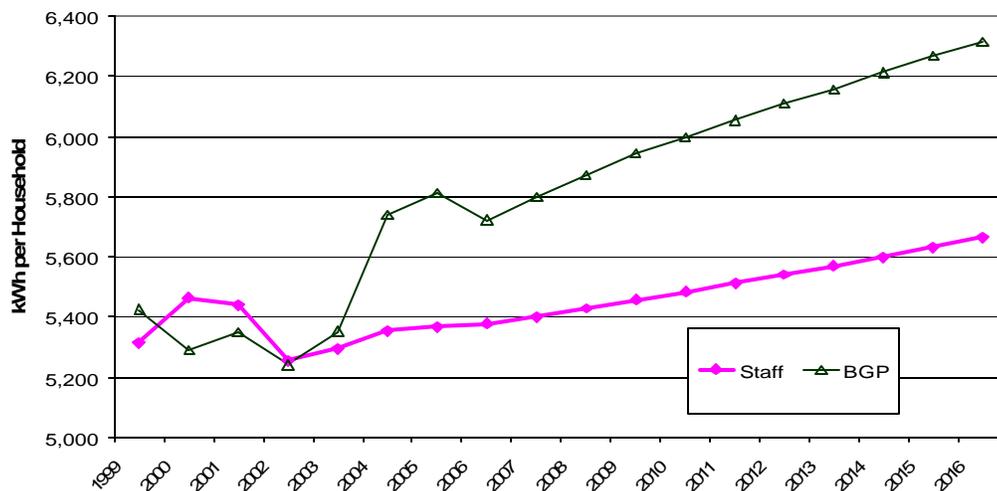


Figure 7-4 shows the difference between the POU and staff forecasts in terms of annual electricity consumption per home. Both the POU's and staff project rising consumption levels per home, but the POU's rate of growth is much higher than staff's. This difference most likely reflects different assumptions concerning the effects of the 2001 and 2005 building and appliance standards.

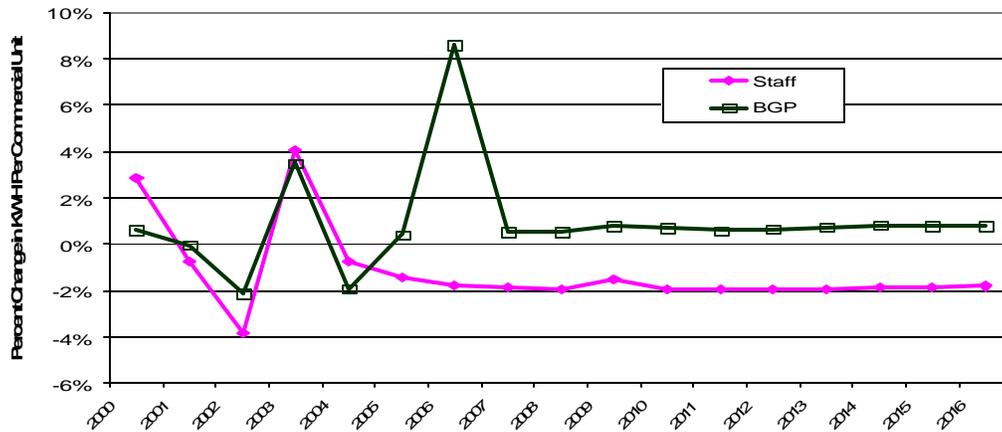
Figure 7-4: BGP Planning Area Electricity Use per Household



A similar situation is reflected in Figure 7-5, which shows the annual rate of change on commercial consumption per commercial unit. Staff's rate of change is based upon kilowatt hours consumed annually per square foot of commercial buildings. The BGP utilities did not provide a record of commercial square footage, but did provide the number of commercial customers. So, the POU's rate of change is indexed to kilowatt hours consumed per commercial customer.

Although the indexes themselves are different, the rate of change per year is similar until 2006, the point at which the 2005 commercial standards begin to affect consumption. Staff estimates a declining level of use per square foot, reflecting staff's assumption that the standards will greatly affect commercial consumption.

Figure 7-5: BGP Planning Area Consumption per Commercial Unit



Endnotes

¹ California Energy Demand 2006-2016, Publication #, CEC-400-2005-023-SD

² Demand forecast uncertainties consist broadly of two sources: (1) uncertainty in the assumed level of economic and demographic projections compared to what will eventually happen in the real world, and (2) errors resulting from inadequate modeling of the structural and behavioral relationships between economic and demographic activity and electricity consumption.

³ This comparison uses the self-generation energy reported by SCE on Form 3.3, as the energy reported on Form 1.7 seemed inconsistent with SCE's peak self-generation forecast.

⁴ "2030 Regional Growth Forecast," June 2004, San Diego Association of Governments (SANDAG).

⁵ As a general rule, the difficulties staff has with historic consumption have to do with its classification using the NAICS codes, e.g. into industry and business-specific categories. For LADWP historic consumption, much more fundamental differences about the total sales to end-users in the LADWP service area seem to exist.

APPENDIX A: ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS OF SUBMITTED FORECASTS

This appendix contains Form 2.2 as submitted by IOUs and POU's participating in the 2005 *Energy Report* as part of their demand forecast data submittals. Form 2.2 documents the economic and demographic assumptions used by each LSE for its forecast. Some participating POU's did not report any data on this form, so they are not included here.

ESP's generally reported projected customer counts in lieu of traditional economic and demographic variables, which is logical given their focus on serving portions of service area customers. Since these data were designated as confidential in the Executive Director letters responding to the ESP's confidentiality requests, the ESP's customer count projections cannot be included in this appendix.

FORM 2.2
PG&E

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

	CPI	HOUSEHOLDS (000s)	GMP (Millions 96\$)	GMP Services, Trade, and Finance (Millions 96\$)	GMP Food Processing (Millions 96\$)
1990	144.5	4,290	373,598	215,263	6,903
1991	150.6	4,326	373,458	219,996	6,774
1992	155.8	4,393	375,134	221,910	6,447
1993	157.0	4,411	375,159	224,152	6,377
1994	158.6	4,418	383,548	229,531	6,055
1995	162.8	4,462	403,118	240,875	7,095
1996	166.7	4,523	421,534	253,917	6,357
1997	172.8	4,604	453,404	272,906	6,291
1998	179.3	4,674	481,963	293,501	5,895
1999	188.6	4,727	532,156	320,946	6,278
2000	201.1	4,791	605,320	362,416	6,279
2001	207.0	4,862	609,830	376,663	5,344
2002	208.5	4,909	611,873	389,602	5,192
2003	212.1	4,962	616,806	396,417	5,219
2004	216.6	5,034	631,976	409,750	5,173
2005	221.6	5,127	654,420	428,359	5,108
2006	226.2	5,208	678,004	446,659	5,090
2007	231.5	5,290	703,333	466,246	5,100
2008	236.5	5,378	729,825	486,142	5,113
2009	241.8	5,469	755,814	505,230	5,152
2010	247.2	5,560	781,218	524,165	5,149
2011	252.7	5,654	806,788	543,076	5,172
2012	258.1	5,752	832,748	562,802	5,148
2013	263.6	5,853	858,488	582,213	5,120
2014	269.3	5,946	883,836	601,783	5,094
2015	275.1	6,034	908,610	621,177	5,070
2016	281.1	6,115	933,834	641,275	5,049

* This form is to be filled out by all distribution utilities

1990-2003	3.0%	1.1%	3.9%	4.8%	-2.1%
2003-2008	2.2%	1.6%	3.4%	4.2%	-0.4%
2008-2016	2.2%	1.6%	3.1%	3.5%	-0.2%
2003-2016	2.2%	1.6%	3.2%	3.8%	-0.3%

FORM 2.2

**SOUTHERN CALIFORNIA EDISON
REDACTED**

**PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area**

	CA PERSONAL CONSUMPTION DEFLATOR (2000=1,000)	TOTAL PERSONAL INCOME (BILLIONS 2000 \$s)	HOUSEHOLD INCOME (2000 \$s)	POPULATION (000s)	HOUSEHOLDS (000S)	CIVILIAN EMPLOYMENT (000s)	TOTAL NON-AGRICULTURAL EMPLOYMENT (000s)	MANUFACTURING EMPLOYMENT (000s)	COMMERCIAL EMPLOYMENT (000s)	PUBLIC SECTOR EMPLOYMENT (000s)	BUILDING PERMITS	COMMERCIAL FLOORSPACE (000's of SQFT)	PUBLIC SECTOR FLOORSPACE (000's of SQFT)	MANUFACTURING FLOORSPACE (000's of SQFT)
1990	0.82	251.1	70,403	10,869.0	3,566.6	4,826.0	4,441.8	766.0	2,731.7	664.3	55,241	1,579,913	205,694	416,705
1991	0.83	265.8	74,203	11,027.8	3,600.7	4,825.2	4,262.7	720.9	2,691.7	583.3	34,431	1,651,477	209,868	419,577
1992	0.86	266.9	73,808	11,229.4	3,626.0	4,797.3	4,149.9	673.7	2,653.1	578.9	32,933	1,695,211	213,280	420,014
1993	0.88	265.3	72,952	11,378.2	3,642.3	4,800.9	4,104.0	642.3	2,647.2	579.3	25,892	1,717,104	217,914	416,138
1994	0.90	266.0	72,828	11,506.1	3,664.5	4,953.3	4,176.2	647.2	2,693.4	589.3	32,863	1,731,893	221,596	411,773
1995	0.92	274.7	74,674	11,616.5	3,692.0	4,992.2	4,232.9	647.6	2,746.2	592.6	27,191	1,744,687	223,938	408,049
1996	0.94	282.4	76,117	11,757.3	3,726.7	5,101.2	4,312.2	666.0	2,799.0	604.8	29,672	1,761,851	226,144	404,767
1997	0.95	294.4	78,729	11,892.7	3,752.2	5,327.0	4,439.8	683.1	2,892.3	614.1	36,293	1,779,341	227,339	401,513
1998	0.96	311.9	82,680	12,138.7	3,791.2	5,446.6	4,577.0	687.3	2,983.0	634.9	39,365	1,795,748	228,572	398,283
1999	0.98	329.3	86,260	12,188.2	3,843.9	5,621.3	4,713.9	681.7	3,085.0	664.8	45,271	1,849,902	233,757	399,344
2000	1.00	355.9	92,077	12,360.3	3,885.0	5,762.2	4,810.1	679.1	3,150.4	687.8	43,791	1,893,706	235,642	400,031
2001	1.02	357.4	91,367	12,612.5	3,931.4	5,829.0	4,832.2	621.9	3,195.8	719.3	45,465	1,942,461	238,418	400,039
2002	1.04	356.2	90,043	12,865.1	3,977.2	5,866.9	4,869.0	595.0	3,248.9	726.2	54,075	1,988,629	242,769	399,336
2003	1.06	360.9	90,099	13,093.0	4,030.5	5,910.7	4,854.3	567.4	3,279.0	706.2	62,089	2,033,406	249,254	397,895
2004	1.08	373.7	92,022	13,240.5	4,091.0	6,046.3	4,903.7	570.9	3,343.8	694.4	66,242	2,066,619	255,296	396,089
2005	1.10	388.1	94,092	13,383.9	4,153.8	6,105.2	4,951.0	559.7	3,397.4	696.2	61,459	2,101,083	262,372	394,351
2006	1.11	402.9	96,291	13,529.0	4,209.8	6,160.5	4,994.6	558.5	3,441.1	698.0	57,551	2,139,930	269,620	393,124
2007	1.14	418.2	98,659	13,678.1	4,263.4	6,231.6	5,051.1	554.6	3,492.2	707.1	57,147	2,183,216	276,158	392,401
2008	1.16	434.4	101,213	13,824.5	4,315.5	6,299.9	5,105.4	549.0	3,541.3	717.5	56,436	2,222,561	279,851	391,214
2009	1.18	451.3	103,929	13,972.3	4,365.5	6,375.5	5,165.5	543.5	3,589.6	731.7	55,427	2,261,126	283,436	389,921
2010	1.21	468.8	106,730	14,121.5	4,414.6	6,455.6	5,229.3	537.8	3,643.2	749.5	55,907	2,298,906	286,915	388,523
2011	1.24	486.3	109,481	14,275.0	4,464.3	6,542.5	5,298.6	532.7	3,699.2	767.2	56,821	2,335,897	290,292	387,020
2012	1.28	504.4	112,312	14,434.2	4,514.1	6,620.6	5,360.5	527.1	3,753.6	779.7	57,023	2,372,094	293,571	385,414
2013	1.31	523.2	115,241	14,587.7	4,562.1	6,713.9	5,435.0	517.6	3,820.1	794.2	58,032	2,407,499	296,755	383,707
2014	1.34	542.8	118,276	14,746.1	4,611.6	6,814.3	5,515.1	509.2	3,888.6	810.3	58,788	2,442,110	299,848	381,901
2015	1.38	562.6	121,283	14,905.8	4,661.6	6,905.0	5,587.3	500.5	3,949.1	827.0	57,829	2,475,929	302,854	379,999
2016	1.41	582.1	124,140	15,068.1	4,712.3	6,994.5	5,658.2	493.8	4,014.2	836.7	58,340	2,508,961	305,778	378,002

* This form is to be filled out by all distribution utilities

1990-2003	2.0%	2.8%	1.9%	1.4%	0.9%	1.6%	0.7%	-2.3%	1.4%	0.5%		2.0%	1.5%	-0.4%
2003-2008	1.9%	3.8%	2.4%	1.1%	1.4%	1.3%	1.0%	-0.7%	1.6%	0.3%		1.8%	2.3%	-0.3%
2008-2016	2.5%	3.7%	2.6%	1.1%	1.1%	1.3%	1.3%	-1.3%	1.6%	1.9%		1.5%	1.1%	-0.4%
2003-2016	2.3%	3.7%	2.5%	1.1%	1.2%	1.3%	1.2%	-1.1%	1.6%	1.3%		1.6%	1.6%	-0.4%

FORM 2.2**San Diego Gas & Electric****PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS***
Projections for Service Area

	GDP IMPLICIT PRICE DEFLATOR (2003=100)	POPULATION (000s)	BUILDING PERMITS	TOTAL NON- AGRICULTURAL EMPLOYMENT (1,000s)	PERSONAL INCOME (\$Million)
1990	72	2,516	16,620	967	52,388
1991	75	2,558	8,670	963	54,045
1992	77	2,592	6,649	947	56,611
1993	78	2,602	5,862	947	57,603
1994	79	2,615	7,101	955	59,318
1995	80	2,628	6,872	978	61,746
1996	82	2,657	7,075	1,006	65,883
1997	82	2,698	11,149	1,054	70,541
1998	84	2,744	12,155	1,105	77,974
1999	86	2,793	15,516	1,153	84,344
2000	90	2,830	15,151	1,194	92,663
2001	94	2,869	14,880	1,218	97,057
2002	97	2,907	13,290	1,231	100,809
2003	100	2,934	16,837	1,242	106,223
2004	102	2,965	16,450	1,260	113,059
2005	104	3,005	17,720	1,286	119,222
2006	107	3,045	16,575	1,306	125,613
2007	110	3,084	16,427	1,328	133,065
2008	113	3,126	16,259	1,350	141,487
2009	116	3,170	15,903	1,372	150,590
2010	119	3,214	16,028	1,395	160,433
2011	123	3,260	16,323	1,419	171,096
2012	127	3,306	16,416	1,444	182,632
2013	131	3,352	16,742	1,470	194,842
2014	135	3,400	16,968	1,499	207,950
2015	139	3,447	16,497	1,528	221,436
2016	143	3,495	16,580	1,557	235,263

* This form is to be filled out by all distribution utilities

Source: Global Insight Fall/Winter 2004

1990-2004	2.5%	1.2%		1.9%	5.6%
2004-2008	2.5%	1.3%		1.7%	5.8%
2008-2016	3.0%	1.4%		1.8%	6.6%
2004-2016	2.8%	1.4%		1.8%	6.3%

FORM 2.2

Sacramento Municipal Utility District

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*

Projections for Service Area

Year	GDP IMPLICIT PRICE DEFLATOR (2003=100)	POPULATION (000s)	HOUSEHOLDS	GSP (Millions 2001\$)	TOTAL NON-AGRICULTURAL EMPLOYMENT (1,000s)	PERSONAL INCOME	FLOORSPACE MM SQFT)
1990	77	1,070,500	399,280		674,370	21	202
1991	80	1,102,400	409,112		673,730	21	205
1992	81	1,117,500	414,141		667,610	23	209
1993	83	1,130,600	412,000*		663,910	23	209
1994	85	1,134,300	419,381		673,890	24	210
1995	87	1,137,000	424,107		687,600	25	212
1996	89	1,149,700	428,803		697,390	26	213
1997	90	1,164,200	433,099		719,100	28	215
1998	91	1,190,700	438,776		742,700	30	216
1999	92	1,219,500	446,475		781,300	32	218
2000	94	1,242,000	455,171		808,500	34	222
2001	97	1,267,800	463,631		834,300	36	225
2002	98	1,280,900	474,406		834,300	38	229
2003	100	1,308,460	485,909		832,000	40	232
2004	102	1,342,800	500,116		874,500	42	236
2005	103	1,370,500	511,571		901,000	44	239
2006	105	1,397,800	523,517		924,400	47	243
2007	108	1,424,400	534,269		946,600	50	246
2008	111	1,449,900	545,060		965,900	53	250
2009	114	1,474,200	556,098		985,100	57	253
2010	117	1,497,350	567,178		1,006,500	60	257
2011	121	1,519,200	578,079		1,029,500	64	260
2012	125	1,539,700	588,561		1,053,500	68	264
2013	129	1,558,700	599,051		1,079,000	73	267
2014	134	1,576,300	609,788		1,106,200	77	270
2015	139	1,594,099	620,716		1,134,086	82	274
2016	144	1,612,098	631,841		1,162,674	88	277

* This form is to be filled out by all distribution utilities

1990-2003	2.0%	1.6%	1.5%	0.0%	1.6%	5.1%	1.1%
2003-2008	2.1%	2.1%	2.3%	0.0%	3.0%	6.1%	1.5%
2008-2016	3.3%	1.3%	1.9%	0.0%	2.3%	6.4%	1.3%
2003-2016	2.8%	1.6%	2.0%	0.0%	2.6%	6.3%	1.4%

FORM 2.2
City of Anaheim

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

Source	http://www.calmis.ca.gov/htmlfile/cou/county/orange.htm	http://www.calmis.ca.gov/htmlfile/cou/county/orange.htm	http://www.calmis.ca.gov/htmlfile/cou/county/orange.htm	http://www.census.gov/popest/cities/files/SUB-EST2003-almo.csv	City of Anaheim	City of Anaheim	City of Anaheim
Month	Orange County Amusement Gambling and Recreation Employment	Orange County Unemployment	Orange County Electronics and Appliance Stores Employment	City of Anaheim Population	Cooling Degree Days	Heatind Degree Days	Maximum Monthly Temperature
1993:06	20700	93100	7500	288,083	173.105	18.68	90.71
1993:07	21700	99300	7700	288,653	222.175	0	89.82
1993:08	21600	92700	7600	289,224	259.94	0	90.87
1993:09	21500	91700	7900	289,794	224.785	0	97.47
1993:10	21100	88700	7900	290,365	131.44	8.45	93.03
1993:11	20400	85600	8100	290,935	17.86	109.61	86.7
1993:12	20500	78600	8400	291,506	9.46	226.785	82.59
1994:01	18600	87900	8100	292,076	9.77	204.205	81.9
1994:02	18800	85100	8300	292,646	0	241.965	75.31
1994:03	19100	78300	8300	293,217	23.91	141.495	86.49
1994:04	19900	77000	8300	293,787	18.99	115.515	88
1994:05	20800	76400	8400	294,358	15.245	86.675	88.5
1994:06	21400	79900	8400	294,928	174.94	18.65	91.72
1994:07	21700	85100	8600	295,499	219.5	0	86.97
1994:08	21700	78800	8600	296,069	379.39	0	101.05
1994:09	22000	75100	8600	296,640	243.105	0	95.2
1994:10	21200	70600	8800	297,210	76.835	25.67	98.73
1994:11	20100	65100	9300	297,780	5.585	248.635	82.17
1994:12	20200	59300	9800	298,351	0.65	276.585	76.05
1995:01	19100	70600	9300	298,921	5.605	304.15	80.9
1995:02	19500	67400	9400	299,492	44.21	127.675	91.08
1995:03	20000	64200	9500	300,062	9.07	154.35	84.59
1995:04	20400	67300	9500	300,633	24.19	118.525	87.65
1995:05	21300	67400	9600	301,203	12.7	112.46	80.69
1995:06	22600	71200	9700	301,774	73.115	35.975	89.24
1995:07	23300	76600	9900	302,344	247.66	0	96.52
1995:08	23100	72000	10200	302,914	325.795	0	98.63
1995:09	22600	70300	10400	303,485	257.115	0	96.57
1995:10	22000	67300	10600	304,055	96.82	7.99	98.94
1995:11	21300	63000	10900	304,626	14.99	60.685	85.28
1995:12	21600	55100	11400	305,196	0	225.145	77.15
1996:01	21600	62100	10800	305,767	22.455	228.695	90.19
1996:02	21300	60000	10400	306,337	11.895	188.155	88.29
1996:03	21700	55700	10400	306,908	10.155	171.825	86.28
1996:04	21800	54600	10400	307,478	77.08	66.535	94.46
1996:05	22300	54700	10300	308,048	78.305	15.15	92.51
1996:06	22700	57300	10400	308,619	164.42	4.445	98.1
1996:07	23700	60600	10200	309,189	279.575	0	97.31
1996:08	23600	57000	10300	309,760	323.65	0	96.57
1996:09	22900	54800	10500	310,330	198.925	0	90.55
1996:10	22500	51700	10300	310,901	71.145	54.2	88.23
1996:11	21200	47700	10500	311,471	52.86	117.54	92.82
1996:12	20700	43300	10900	312,042	2.915	173.98	81.06
1997:01	20000	50800	10600	312,612	1.68	262.465	77.21
1997:02	20600	47300	10400	313,182	7.75	174.6	83.41
1997:03	21200	43800	10300	313,753	42.3	94.79	94.14
1997:04	22300	42800	10600	314,323	18.035	102.53	84.17
1997:05	23000	43100	10700	314,894	165.465	0	91.72
1997:06	24000	46900	10600	315,464	124.83	1.13	80.95
1997:07	24100	50800	10600	316,035	185.805	0	93.03
1997:08	23700	47700	10600	316,605	312.49	0	99.42
1997:09	22400	47600	10700	317,176	353.375	0	98.63
1997:10	22600	44200	11200	317,746	146.86	11.095	99.15
1997:11	21300	40000	11500	318,316	40.41	107.255	97.26
1997:12	21300	37000	11700	318,887	7.155	250.135	83.33
1998:01	20800	43900	11400	319,457	0	260.56	77.36
1998:02	21300	41700	11300	320,028	0	266.045	77.36
1998:03	21800	39500	11300	320,598	15.02	151.61	86.9
1998:04	21900	38300	11400	321,169	27.135	149.315	88.52
1998:05	22500	38600	11400	321,739	8.135	52.105	81.36
1998:06	23300	43700	11400	322,310	85.31	3.235	84.34
1998:07	24600	46500	11100	322,880	311.53	0	96.62
1998:08	24500	44500	11100	323,450	380.29	0	101.16
1998:09	24500	44000	11100	324,021	171.33	10.97	100.21
1998:10	24600	41400	11100	324,591	58.015	18.865	93.25
1998:11	24900	39000	11300	325,162	3	121	79
1998:12	25800	35500	11700	325,732	8.215	293.732	86.39
1999:01	23800	42600	11200	326,303	1.115	246.445	82.96
1999:02	23800	40000	11200	326,873	0	234.115	78.47
1999:03	24200	38400	11300	327,444	0	319.71	72.99
1999:04	23800	36500	11200	328,014	35.195	232.06	90.5
1999:05	24500	35500	11400	328,584	4.75	82.97	79.95
1999:06	25200	41100	11300	328,369	63.445	30.215	85.81
1999:07	25800	44200	10800	328,547	228.26	0	93.4
1999:08	25200	40400	11000	328,725	217.555	0	92.09

City of Anaheim

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

Source	http://www.calmis.ca.gov/htmlfile/county/orange.htm	http://www.calmis.ca.gov/htmlfile/county/orange.htm	http://www.calmis.ca.gov/htmlfile/county/orange.htm	http://www.census.gov/popest/cities/files/SUB-EST2003-also.csv	City of Anaheim	City of Anaheim	City of Anaheim
Month	Orange County Amusement Gambling and Recreation Employment	Orange County Unemployment	Orange County Electronics and Appliance Stores Employment	City of Anaheim Population	Cooling Degree Days	Heatind Degree Days	Maximum Monthly Temperature
1999:09	25400	39700	11000	328,903	151.65	0.56	106.65
1999:10	24400	39000	11000	329,081	210.88	1.045	97.1
1999:11	23400	36800	11200	329,260	1.655	111.085	83.75
1999:12	24000	33300	11500	329,438	6.39	164.36	82.69
2000:01	22700	39300	11700	329,617	7.185	192.78	80.85
2000:02	22700	37700	11700	329,795	5.25	194.075	84.33
2000:03	22900	37200	11900	329,974	4.54	183.725	84.33
2000:04	23200	36000	11400	330,152	26.375	49.085	90.45
2000:05	24400	36300	11900	330,331	80.855	13.595	89.13
2000:06	24700	42500	12100	330,510	173.51	1.5	97
2000:07	27300	45300	11900	330,689	219.4	0	95.3
2000:08	27300	41400	12000	330,868	309.705	0	97
2000:09	26800	39100	12000	331,048	213.33	1.5	97.6
2000:10	26900	37600	12100	331,227	30.095	53.55	81
2000:11	25000	34800	11700	331,406	3	195.5	81
2000:12	24800	30700	12500	331,586	7.5	199.85	80
2001:01	30600	37300	12300	331,765	8.25	338.35	84
2001:02	30700	37800	12200	331,945	15.2	316.15	90
2001:03	31200	37300	12000	332,125	78.2	174.75	91.9
2001:04	32700	39700	11300	332,305	19.05	196.81	93.75
2001:05	32000	40800	11100	332,485	76	15.5	86
2001:06	33100	47900	10800	332,665	170.325	2	93.05
2001:07	33100	52800	10400	332,845	215.2525	0	89
2001:08	35200	52100	10100	333,025	268.96	0	93
2001:09	34600	52400	9900	333,206	211.9875	0	97.25
2001:10	32600	56900	10100	333,386	92.9275	9.075	95.6
2001:11	33500	56600	10200	333,567	3.81	130.1625	82.25
2001:12	33300	51100	10200	333,748	3.19	296.76	80.75
2002:01	30600	62200	9900	333,928	1.45	313.22	79.2
2002:02	31300	61500	9900	334,109	19	182.975	90
2002:03	32900	62000	9800	334,290	0	232.84	79.4
2002:04	31700	61200	9700	334,471	1.925	161.675	81.5
2002:05	32400	60600	9600	334,652	49.1	64.45	91.95
2002:06	32500	67700	9600	334,834	112.6825	3.4	84.55
2002:07	34300	71200	9200	335,015	238.475	0	85.25
2002:08	34400	67800	9100	335,197	219.9	0	89.4
2002:09	33700	67400	9200	335,378	249.52	0.3	102
2002:10	34100	67800	9400	335,560	45.675	52.6	89.6
2002:11	32800	65200	9800	335,742	83.89	52.525	90.5
2002:12	32700	60800	10100	335,923	0	236.925	75.05
2003:01	32000	63300	9700	336,105	59.85	88.525	93.95
2003:02	31700	62400	9400	336,287	1.825	175.825	75.75
2003:03	31300	61600	9300	336,470	34.35	122.05	90.5
2003:04	32400	60100	9200	336,652	15.1	147.5	89.7
2003:05	33300	57600	9100	336,834	80.295	48.775	90.9
2003:06	34400	62800	11158.84027	337,017	104.025	6.325	88.75
2003:07	35400	65000	11172.89256	337,199	370.2375	0	92.1
2003:08	34900	61900	11186.94486	337,382	393.35	0	98.55
2003:09	33100	57900	11200.99715	337,565	290.1575	0	97.65
2003:10	33600	58800	11215.04945	337,747	232.7225	6.775	98.05
2003:11	32903.35638	66308	11229.10175	337,930	22.706	125.39975	86.00333333
2003:12	32893.46583	61834	11243.15404	338,113	4.5475	234.3555	80.27444444
2004:01	32063.74609	64376	11257.20634	338,297	11.736	243.9395	82.95777778
2004:02	32092.57397	63461	11271.25864	338,480	10.513	210.158	84.29888889
2004:03	32440.75717	62647	11285.31093	338,663	21.7545	174.7145	85.22444444
2004:04	32561.47467	61122	11299.36323	338,847	26.3075	133.955	88.77777778
2004:05	32427.68428	58579	11313.41553	339,030	57.085	49.168	86.86777778
2004:06	33852.14644	63868	11327.46782	339,214	129.0643182	11.41409091	89.41777778
2004:07	35022.19575	66105	11341.52012	339,398	248.8972727	0	92.6
2004:08	34639.45375	62952	11355.57242	339,581	308.275	0	96.48
2004:09	34059.60769	58884	11369.62471	339,765	233.2072727	1.211818182	98.29555556
2004:10	33978.60044	59800	11383.67701	339,949	108.4922727	22.665	93.51111111
2004:11	34228.54389	67435	11397.7293	340,133	22.706	125.39975	86.00333333
2004:12	34218.50717	62885	11411.7816	340,318	4.5475	234.3555	80.27444444
2005:01	33388.49509	65470	11425.8339	340,502	11.736	243.9395	82.95777778
2005:02	33417.95636	64540	11439.88619	340,686	10.513	210.158	84.29888889
2005:03	33767.35761	63712	11453.93849	340,871	21.7545	174.7145	85.22444444
2005:04	33880.86426	62161	11467.99079	341,168	26.3075	133.955	88.77777778
2005:05	33744.78394	59575	11482.04308	341,464	57.085	49.168	86.86777778
2005:06	35180.20854	64954	11496.09538	341,761	129.0643182	11.41409091	89.41777778
2005:07	36164.91966	67064	11510.14768	342,059	248.8972727	0	92.6
2005:08	35775.98997	63865	11524.19997	342,356	308.275	0	96.48
2005:09	35187.61759	59738	11538.25227	342,654	233.2072727	1.211818182	98.29555556
2005:10	35124.49127	60667	11552.30457	342,952	108.4922727	22.665	93.51111111
2005:11	35378.08887	68413	11566.35686	343,251	22.706	125.39975	86.00333333
2005:12	35367.90599	63797	11580.40916	343,549	4.5475	234.3555	80.27444444

City of Anaheim

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

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Month	Orange County Amusement Gambling and Recreation Employment	Orange County Unemployment	Orange County Electronics and Appliance Stores Employment	City of Anaheim Population	Cooling Degree Days	Heatind Degree Days	Maximum Monthly Temperature
2006:01	34537.6503	66419	11594.46146	343,848	11,736	243.9395	82.95777778
2006:02	34567.64751	65476	11608.51375	344,147	10,513	210.158	84.29888889
2006:03	34918.12064	64636	11622.56605	344,447	21.7545	174.7145	85.22444444
2006:04	35025.34217	63062	11636.61834	344,746	26.3075	133.955	88.77777778
2006:05	34887.31297	60439	11650.67064	345,046	57.085	49.168	86.86777778
2006:06	36332.23834	65896	11664.72294	345,347	129.0643182	11.41409091	89.41777778
2006:07	37324.20903	68036	11678.77523	345,647	248.8972727	0	92.6
2006:08	36929.04293	64791	11692.82753	345,948	308.275	0	96.48
2006:09	36331.99804	60604	11706.87983	346,249	233.2072727	1.211818182	98.29555556
2006:10	36286.99629	61547	11720.93212	346,550	108.4922727	22.665	93.51111111
2006:11	36544.29675	69405	11734.98442	346,851	22.706	125.39975	86.00333333
2006:12	36533.9677	64722	11749.03672	347,153	4.5475	234.3555	80.27444444
2007:01	35703.4684	67382	11763.08901	347,455	11.736	243.9395	82.95777778
2007:02	35734.00156	66425	11777.14131	347,758	10,513	210.158	84.29888889
2007:03	36085.59528	65573	11791.19361	348,060	21.7545	174.7145	85.22444444
2007:04	36186.43424	63976	11805.2459	348,363	26.3075	133.955	88.77777778
2007:05	36046.40744	61315	11819.2982	348,666	57.085	49.168	86.86777778
2007:06	37500.93103	66851	11833.35049	348,969	129.0643182	11.41409091	89.41777778
2007:07	38500.30745	69023	11847.40279	349,273	248.8972727	0	92.6
2007:08	38098.80751	65730	11861.45509	349,577	308.275	0	96.48
2007:09	37492.94395	61483	11875.50738	349,881	233.2072727	1.211818182	98.29555556
2007:10	37466.35908	62439	11889.55968	350,185	108.4922727	22.665	93.51111111
2007:11	37727.41113	70411	11903.61198	350,490	22.706	125.39975	86.00333333
2007:12	37716.93592	65660	11917.66427	350,795	4.5475	234.3555	80.27444444
2008:01	36886.19301	68359	11931.71657	351,100	11.736	243.9395	82.95777778
2008:02	36917.26211	67388	11945.76887	351,406	10,513	210.158	84.29888889
2008:03	37269.97644	66524	11959.82116	351,711	21.7545	174.7145	85.22444444
2008:04	37364.33538	64904	11973.87346	352,017	26.3075	133.955	88.77777778
2008:05	37222.31098	62204	11987.92576	352,324	57.085	49.168	86.86777778
2008:06	38686.57896	67820	12001.97805	352,630	129.0643182	11.41409091	89.41777778
2008:07	39693.45855	70024	12016.03035	352,937	248.8972727	0	92.6
2008:08	39285.52732	66683	12030.08264	353,244	308.275	0	96.48
2008:09	38670.74765	62375	12044.13494	353,551	233.2072727	1.211818182	98.29555556
2008:10	38662.82327	63344	12058.18724	353,859	108.4922727	22.665	93.51111111
2008:11	38927.67563	71432	12072.23953	354,167	22.706	125.39975	86.00333333
2008:12	38917.05425	66612	12086.29183	354,475	4.5475	234.3555	80.27444444
2009:01	38086.06773	69350	12100.34413	354,783	11.736	243.9395	82.95777778
2009:02	38117.67277	68365	12114.39642	355,092	10,513	210.158	84.29888889
2009:03	38471.50771	67489	12128.44872	355,401	21.7545	174.7145	85.22444444
2009:04	38559.33791	65845	12142.50102	355,710	26.3075	133.955	88.77777778
2009:05	38415.2672	63106	12156.55331	356,019	57.085	49.168	86.86777778
2009:06	39889.42572	68803	12170.60561	356,329	129.0643182	11.41409091	89.41777778
2009:07	40903.95466	71039	12184.65791	356,639	248.8972727	0	92.6
2009:08	40489.44596	67650	12198.7102	356,949	308.275	0	96.48
2009:09	39865.60402	63279	12212.7625	357,260	233.2072727	1.211818182	98.29555556
2009:10	39876.63247	64262	12226.81479	357,571	108.4922727	22.665	93.51111111
2009:11	40145.33386	72468	12240.86709	357,882	22.706	125.39975	86.00333333
2009:12	40134.56631	67578	12254.91939	358,193	4.5475	234.3555	80.27444444
2010:01	39303.33618	70356	12268.97168	358,505	11.736	243.9395	82.95777778
2010:02	39335.47716	69356	12283.02398	358,817	10,513	210.158	84.29888889
2010:03	39690.48143	68468	12297.07628	359,129	21.7545	174.7145	85.22444444
2010:04	39771.63673	66800	12311.12857	359,442	26.3075	133.955	88.77777778
2010:05	39625.51969	64021	12325.18087	359,755	57.085	49.168	86.86777778
2010:06	41109.71493	69801	12339.23317	359,468	129.0643182	11.41409091	89.41777778
2010:07	41666.16038	71678	12353.28546	359,582	248.8972727	0	92.6
2010:08	40805.31017	67904	12367.33776	359,695	308.275	0	96.48
2010:09	40179.08085	63516	12381.39006	359,808	233.2072727	1.211818182	98.29555556
2010:10	40195.12766	64503	12395.44235	359,922	108.4922727	22.665	93.51111111
2010:11	40464.80349	72740	12409.49465	360,035	22.706	125.39975	86.00333333
2010:12	40453.98722	67831	12423.54694	360,148	4.5475	234.3555	80.27444444
2011:01	39622.70837	70620	12437.59924	360,262	11.736	243.9395	82.95777778
2011:02	39654.99552	69616	12451.65154	360,375	10,513	210.158	84.29888889
2011:03	40010.29211	68725	12465.70383	360,489	21.7545	174.7145	85.22444444
2011:04	40089.69342	67051	12479.75613	360,602	26.3075	133.955	88.77777778
2011:05	39943.04044	64261	12493.80843	360,716	57.085	49.168	86.86777778
2011:06	41429.86666	70063	12507.86072	360,830	129.0643182	11.41409091	89.41777778
2011:07	41986.60444	71947	12521.91302	360,943	248.8972727	0	92.6
2011:08	41122.39243	68159	12535.96532	361,057	308.275	0	96.48
2011:09	40493.77573	63754	12550.01761	361,171	233.2072727	1.211818182	98.29555556
2011:10	40514.79218	64745	12564.06991	361,284	108.4922727	22.665	93.51111111
2011:11	40785.49116	73013	12578.12221	361,398	22.706	125.39975	86.00333333
2011:12	40774.62618	68085	12592.1745	361,512	4.5475	234.3555	80.27444444
2012:01	39943.2986	70885	12606.2268	361,626	11.736	243.9395	82.95777778
2012:02	39975.73191	69877	12620.27909	361,740	10,513	210.158	84.29888889
2012:03	40331.32084	68983	12634.33139	361,854	21.7545	174.7145	85.22444444
2012:04	40408.96817	67302	12648.38369	361,968	26.3075	133.955	88.77777778

City of Anaheim

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

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Month	Orange County Amusement Gambling and Recreation Employment	Orange County Unemployment	Orange County Electronics and Appliance Stores Employment	City of Anaheim Population	Cooling Degree Days	Heatind Degree Days	Maximum Monthly Temperature
2012:05	40261.77924	64502	12662.43598	362,082	57,085	49,168	86.86777778
2012:06	41751.23645	70326	12676.48828	362,196	129.0643182	11.41409091	89.41777778
2012:07	42308.26656	72217	12690.54058	362,310	248.8972727	0	92.6
2012:08	41440.64401	68415	12704.59287	362,424	308.275	0	96.48
2012:09	40809.63994	63993	12718.64517	362,538	233.2072727	1.211818182	98.29555556
2012:10	40835.67474	64988	12732.69747	362,652	108.4922727	22.665	93.51111111
2012:11	41107.34817	73287	12746.74976	362,767	22.706	125.39975	86.00333333
2012:12	41096.48318	68340	12760.80206	362,881	4.5475	234.3555	80.27444444
2013:01	40265.05816	71151	12774.85436	362,995	11.736	243.9395	82.95777778
2013:02	40297.63764	70139	12788.90665	363,110	10.513	210.158	84.29888889
2013:03	40653.56762	69242	12802.95895	363,224	21.7545	174.7145	85.22444444
2013:04	40729.41223	67554	12817.01125	363,338	26.3075	133.955	88.77777778
2013:05	40581.68737	64744	12831.06354	363,453	57.085	49.168	86.86777778
2013:06	42073.82428	70590	12845.11584	363,567	129.0643182	11.41409091	89.41777778
2013:07	42631.14672	72488	12859.16813	363,682	248.8972727	0	92.6
2013:08	41760.06492	68672	12873.22043	363,796	308.275	0	96.48
2013:09	41126.67347	64233	12887.27273	363,911	233.2072727	1.211818182	98.29555556
2013:10	41157.72663	65232	12901.32502	364,026	108.4922727	22.665	93.51111111
2013:11	41430.42322	73562	12915.37732	364,140	22.706	125.39975	86.00333333
2013:12	41419.50951	68596	12929.42962	364,255	4.5475	234.3555	80.27444444
2014:01	40588.03577	71418	12943.48191	364,370	11.736	243.9395	82.95777778
2014:02	40620.76141	70402	12957.53421	364,485	10.513	210.158	84.29888889
2014:03	40976.98372	69502	12971.58651	364,599	21.7545	174.7145	85.22444444
2014:04	41051.07435	67807	12985.6388	364,714	26.3075	133.955	88.77777778
2014:05	40902.81355	64987	12999.6911	364,829	57.085	49.168	86.86777778
2014:06	42397.63016	70855	13013.7434	364,944	129.0643182	11.41409091	89.41777778
2014:07	42955.19621	72760	13027.79569	365,059	248.8972727	0	92.6
2014:08	42080.70387	68930	13041.84799	365,174	308.275	0	96.48
2014:09	41444.92506	64474	13055.90028	365,289	233.2072727	1.211818182	98.29555556
2014:10	41480.99657	65477	13069.95258	365,404	108.4922727	22.665	93.51111111
2014:11	41754.71632	73838	13084.00488	365,519	22.706	125.39975	86.00333333
2014:12	41743.75389	68853	13098.05717	365,634	4.5475	234.3555	80.27444444
2015:01	40912.23143	71686	13112.10947	365,749	11.736	243.9395	82.95777778
2015:02	40945.10324	70666	13126.16177	365,865	10.513	210.158	84.29888889
2015:03	41301.61788	69763	13140.21406	365,980	21.7545	174.7145	85.22444444
2015:04	41373.95451	68061	13154.26636	365,993	26.3075	133.955	88.77777778
2015:05	41225.10905	65231	13168.31866	366,007	57.085	49.168	86.86777778
2015:06	42722.60537	71121	13182.37095	366,020	129.0643182	11.41409091	89.41777778
2015:07	43822.64128	73488	13196.42325	366,034	248.8972727	0	92.6
2015:08	42938.94049	69619	13210.47555	366,047	308.275	0	96.48
2015:09	42296.73038	65119	13224.52784	366,060	233.2072727	1.211818182	98.29555556
2015:10	42346.29787	66132	13238.58014	366,074	108.4922727	22.665	93.51111111
2015:11	42622.74605	74576	13252.63243	366,087	22.706	125.39975	86.00333333
2015:12	42611.68617	69542	13266.68473	366,101	4.5475	234.3555	80.27444444
2016:01	41779.96882	72403	13280.73703	366,114	11.736	243.9395	82.95777778
2016:02	41813.23041	71373	13294.78932	366,128	10.513	210.158	84.29888889
2016:03	42170.57332	70461	13308.84162	366,141	21.7545	174.7145	85.22444444
2016:04	42238.18393	68742	13322.89392	366,154	26.3075	133.955	88.77777778
2016:05	42087.82809	65883	13336.94621	366,168	57.085	49.168	86.86777778
2016:06	43592.53525	71832	13350.99851	366,181	129.0643182	11.41409091	89.41777778
2016:07	44698.75884	74223	13365.05081	366,195	248.8972727	0	92.6
2016:08	43805.75217	70315	13379.1031	366,208	308.275	0	96.48
2016:09	43157.06205	65770	13393.1554	366,222	233.2072727	1.211818182	98.29555556
2016:10	43220.27167	66793	13407.2077	366,235	108.4922727	22.665	93.51111111
2016:11	43499.44828	75322	13421.25999	366,248	22.706	125.39975	86.00333333
2016:12	43488.29096	70237	13435.31229	366,262	4.5475	234.3555	80.27444444

FORM 2.2

Imperial Irrigation District

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

	GDP IMPLICIT PRICE DEFLATOR (2001=100)	POPULATION (000s)	HOUSEHOLDS	GSP (Millions 2001\$)	TOTAL NON- AGRICULTURAL EMPLOYMENT (1,000s)	PERSONAL INCOME	TAXABLE SALES	FLOORSPACE MM SQFT)
1990		176,491	55,636					
1991		183,019	57,694					
1992		193,302	60,935					
1993		203,142	67,021					
1994		210,407	68,720					
1995		214,755	70,632					
1996		219,282	72,228					
1997		223,433	73,676					
1998		226,262	75,520					
1999		229,980	77,825					
2000		238,261	84,069					
2001		245,939	86,214					
2002		255,450	89,435					
2003		262,600	95,988					
2004		269,562	98,545					
2005		276,708	101,170					
2006		284,044	103,865					
2007		291,574	106,631					
2008		299,304	109,471					
2009		307,239	112,386					
2010		315,384	115,380					
2011		323,745	118,453					
2012		332,328	121,608					
2013		341,138	124,847					
2014		350,182	128,172					
2015		359,466	131,586					
2016		368,996	135,091					

* This form is to be filled out by all distribution utilities

1990-2003	0.0%	3.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
2003-2008	0.0%	2.7%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2008-2016	0.0%	2.7%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2003-2016	0.0%	2.7%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%

** Imperial Irrigation District does not use GDP, GSP, Non-Agricultural Employment, Personal Income, Taxable Sales, or Floorspace data in their forecast. Population and Household data corresponds to the IID service area within Imperial and Riverside counties and are an aggregate forecast based off of population projections maintained by Southern California Association of Governments, specifically the Riverside county population forecast and the Imperial County forecast found within the SCAG 2001 Regional Transportation study. [Http://www.scag.ca.gov](http://www.scag.ca.gov). Households is calculated using 2000 county census data to come up with an average population per household formula. Formula is as follows:
 ((Total Population - Group Population) * Season reciprocal) / (Total Dwelling Units * Vacancy reciprocal)

FORM 2.2

Modesto Irrigation District

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*

Projections for Service Area

	GDP IMPLICIT PRICE DEFLATOR (2001=100)	OCCUPIED MID HOUSING (1,000s)	INDUSTRIAL EMPLOYEES (1,000S)	COMMERCIAL EMPLOYMENT (1,000S)	TOTAL NON- AGRICULTURAL EMPLOYMENT (1,000s)	HEATING DEGREE DAYS	COOLING DEGREE DAYS	TEMPERATURE BUILD-UP (Degrees)	RAIN (Inches)
1990	78	72	27	134	161	2,578	1,843	104	7
1991	81	73	25	138	163	2,511	1,730	107	10
1992	83	73	25	137	162	2,259	2,038	103	13
1993	86	74	25	138	163	2,400	1,766	104	17
1994	88	74	26	138	164	2,621	1,743	100	11
1995	90	75	25	142	167	1,993	1,725	100	21
1996	91	76	26	147	173	2,117	2,058	106	19
1997	93	76	27	152	179	2,037	2,069	104	10
1998	94	77	28	159	187	2,313	1,956	107	24
1999	96	78	28	164	193	2,601	1,644	106	8
2000	98	80	28	169	197	2,317	1,738	100	19
2001	100	83	28	173	202	2,279	2,037	100	16
2002	101	83	28	177	205	2,634	1,655	104	10
2003	103	86	28	180	208	2,509	1,810	103	12
2004	106	88	28	183	211	2,509	1,810	103	12
2005	108	91	29	185	214	2,509	1,810	103	12
2006	110	93	29	188	217	2,509	1,810	103	12
2007	112	96	29	190	219	2,509	1,810	103	12
2008	115	99	29	193	221	2,509	1,810	103	12
2009	117	103	29	195	224	2,509	1,810	103	12
2010	120	106	29	197	226	2,509	1,810	103	12
2011	122	109	29	199	228	2,509	1,810	103	12
2012	125	113	29	202	230	2,509	1,810	103	12
2013	128	116	29	204	232	2,509	1,810	103	12
2014	132	120	29	206	235	2,509	1,810	103	12
2015	136	123	29	208	237	2,509	1,810	103	12
2016	140	127	29	210	239	2,509	1,810	103	12

* This form is to be filled out by all distribution utilities

1990-2003	2.2%	1.3%	0.4%	2.3%	2.0%	-0.2%	-0.1%	-0.1%	4.3%
2003-2008	2.1%	3.1%	0.1%	1.4%	1.2%	0.0%	0.0%	0.0%	0.0%
2008-2016	2.5%	3.1%	0.0%	1.1%	1.0%	0.0%	0.0%	0.0%	0.0%
2003-2016	2.3%	3.1%	0.1%	1.2%	1.1%	0.0%	0.0%	0.0%	0.0%

FORM 2.2
Redding Electric Utility

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

	CPI - San Francisco	POPULATION (000s)	Person Per Household	GSP (Millions 2001\$)	Shasta County W&S Employment (000)	PERSONAL INCOME	TAXABLE SALES	FLOORSPACE MM SQFT)
1990		66.95						
1991		70.70						
1992	0.959	73.35	2.66		51.48			
1993	0.989	75.30	2.66		51.69			
1994	1.006	76.45	2.62		51.55			
1995	1.027	77.35	2.61		52.10			
1996	1.045	78.15	2.60		53.61			
1997	1.076	78.95	2.59		54.39			
1998	1.111	79.65	2.61		55.28			
1999	1.152	80.55	2.59		56.38			
2000	1.202	81.94	2.59		58.46			
2001	1.247	83.65	2.59		60.43			
2002	1.287	85.16	2.58		62.08			
2003	1.329	86.85	2.57		63.91			
2004	1.372	88.48	2.57		64.59			
2005	1.417	90.08	2.57		67.40			
2006	1.463	91.67	2.56		69.22			
2007	1.510	93.25	2.56		71.09			
2008	1.559	94.82	2.56		73.01			
2009	1.610	96.37	2.56		74.98			
2010	1.662	97.92	2.56		77.01			
2011	1.716	99.45	2.56		79.09			
2012	1.772	100.96	2.56		81.22			
2013	1.830	102.45	2.56		83.42			
2014	1.889	103.93	2.56		85.67			
2015	1.950	105.38	2.55		87.98			
2016	2.014	106.83	2.55		90.35			

* This form is to be filled out by all distribution utilities

1990-2003	3.0%	2.0%	-0.3%	0.0%	2.0%	0.0%	0.0%	0.0%
2003-2008	3.2%	1.8%	-0.1%	0.0%	2.7%	0.0%	0.0%	0.0%
2008-2016	3.3%	1.5%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%
2003-2016	3.2%	1.6%	-0.1%	0.0%	2.7%	0.0%	0.0%	0.0%

FORM 2.2

City of Riverside

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

YEAR	GDP IMPLICIT PRICE DEFLATOR (2001=100)	POPULATION (000s)	HOUSEHOLDS	GSP (Millions 2001\$)	TOTAL NON- AGRICULTURAL EMPLOYMENT (1,000s)	PERSONAL INCOME	TAXABLE SALES	FLOORSPACE MM SQFT)
1990		231,200	78,556					
1991		238,100	78,651					
1992		242,200	79,325					
1993		244,191	79,772					
1994		244,854	80,735					
1995		241,089	79,620					
1996		243,401	80,729					
1997		245,176	81,040					
1998		250,799	82,241					
1999		255,638	83,299					
2000		259,738	84,384					
2001		263,746	86,216					
2002		267,816	87,389					
2003		271,949	88,582					
2004		276,145	89,797					
2005		280,406	91,033					
2006		284,733	92,291					
2007		289,127	93,571					
2008		293,588	94,874					
2009		298,119	96,199					
2010		302,719	97,547					
2011		306,409	98,769					
2012		310,144	100,005					
2013		313,925	101,257					
2014		317,752	102,523					
2015		321,625	103,805					

* This form is to be filled out by all distribution utilities

FORM 2.2
Roseville Electric

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

	GDP IMPLICIT PRICE DEFLATOR (2001=100)	Population (000s)	Customers	GSP (Millions 2001\$)	TOTAL NON- AGRICULTURAL EMPLOYMENT (1,000s)	Median Income	TAXABLE SALES	FLOORSPACE MM SQFT)
1990						\$ 39,975		
1991								
1992		49,500						
1993		52,500						
1994		54,400	27,119					
1995		56,479	28,996					
1996		59,804	30,679					
1997		63,479	32,504					
1998		67,338	35,066					
1999		71,599	37,256					
2000		79,921	38,667			\$ 57,367		
2001		82,087	40,879					
2002		85,772	42,774					
2003		93,300	45,412					
2004		96,900	47,282					
2005		99,312	49,683					
2006		103,482	52,843					
2007		108,627	56,386					
2008		114,096	59,960					
2009		119,405	63,352					
2010		124,381	66,341					
2011		128,525	68,612					
2012		131,311	69,894					
2013		132,354	70,342					
2014								
2015								
2016								

* This form is to be filled out by all distribution utilities

1990-2003	0.0%	0.0%	0.0%	0.0%	0.0%	-100.0%	0.0%	0.0%
2003-2008	0.0%	4.1%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2008-2016	0.0%	-100.0%	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2003-2016	0.0%	-100.0%	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%

FORM 2.2
Silicon Valley Power

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

	GDP IMPLICIT PRICE DEFLATOR (2001=100)	POPULATION (000s)	HOUSEHOLDS	GSP (Millions 2001\$)	TOTAL NON-AGRICULTURAL EMPLOYMENT (1,000s)	PERSONAL INCOME	TAXABLE SALES	FLOORSPACE MM SQFT)
1990		93,613				44,707		
1991		94,100						
1992		95,100						
1993		96,120						
1994		96,800						
1995		97,400						
1996		98,480						
1997		100,000						
1998		101,665					3,303,134,000	
1999		102,333	39,578		961,400	53,969	3,208,004,000	
2000		103,500	40,413		976,600	55,863	3,523,110,000	
2001		104,600	39,685		1,034,900	69,466	4,180,119,000	
2002		104,100	40,091		1,008,200	64,308	3,516,618,000	
2003		105,800	40,310		913,800	58,895		
2004		107,200						
2005								
2006								
2007								
2008								
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								

* This form is to be filled out by all distribution utilities

1990-2003	0.0%	0.9%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%
2003-2008	0.0%	-100.0%	-100.0%	0.0%	-100.0%	-100.0%	0.0%	0.0%
2008-2016	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2003-2016	0.0%	-100.0%	-100.0%	0.0%	-100.0%	-100.0%	0.0%	0.0%

FORM 2.2

Turlock Irrigation District

PLANNING AREA ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS*
Projections for Service Area

	STANISLAUS COUNTY PERSONAL INCOME (\$1996M)	STANISLAUS COUNTY POPULATION (000s)	STANISLAUS COUNTY AGRICULTURAL SERVICES EMPLOYEMENT (000)	AGRICULTURAL SERVICES INCOME (\$1996M)	STANISLAUS COUNTY TOTAL EMPLOYMENT (000)	INDUSTRIAL ELECTRICITY PRICE (\$/kWh)	COMMERCIAL ELECTRICITY PRICE (\$/kWh)	INDUSTRIAL ELECTRICITY PRICE (1996\$/kWh)	COMMERCIAL ELECTRICITY PRICE (1996\$/kWh)	INCOME PER CAPITA IN \$1996
1990	7,401	375,312	7.6	105	173	0.063	0.087	0.076	0.104	19,720
1991	7,453	386,163	7.5	108	176	0.070	0.103	0.081	0.118	19,301
1992	7,551	394,725	6.8	105	174	0.079	0.112	0.088	0.125	19,130
1993	7,611	401,805	6.8	114	175	0.079	0.121	0.085	0.132	18,942
1994	7,620	406,274	6.9	110	176	0.080	0.110	0.085	0.116	18,757
1995	7,669	410,337	8.0	106	179	0.069	0.106	0.071	0.109	18,689
1996	7,954	415,159	9.5	104	185	0.065	0.105	0.065	0.105	19,160
1997	8,350	421,264	9.9	118	190	0.062	0.105	0.060	0.103	19,822
1998	8,908	428,754	10.3	135	199	0.061	0.100	0.059	0.096	20,777
1999	9,149	438,609	10.9	148	206	0.060	0.098	0.056	0.092	20,859
2000	9,548	449,895	10.2	140	210	0.058	0.095	0.053	0.086	21,222
2001	9,646	466,034	9.5	125	212	0.057	0.090	0.051	0.080	20,698
2002	9,942	482,440	9.6	133	215	0.056	0.090	0.049	0.078	20,607
2003	10,189	491,572	9.7	135	218	0.061	0.092	0.052	0.079	20,728
2004	10,441	500,241	9.7	137	221	0.061	0.092	0.051	0.078	20,872
2005	10,696	509,145	9.8	139	224	0.061	0.092	0.050	0.076	21,008
2006	10,958	517,783	9.9	141	228	0.062	0.093	0.049	0.075	21,163
2007	11,225	526,730	9.9	143	231	0.062	0.094	0.049	0.074	21,311
2008	11,499	535,627	10.0	145	234	0.063	0.095	0.048	0.072	21,467
2009	11,778	544,465	10.1	147	237	0.063	0.096	0.047	0.071	21,632
2010	12,064	553,310	10.2	150	240	0.064	0.097	0.047	0.070	21,803
2011	12,356	562,247	10.2	152	244	0.065	0.098	0.046	0.069	21,975
2012	12,654	571,279	10.3	154	247	0.065	0.099	0.045	0.068	22,150
2013	12,959	580,443	10.4	157	250	0.066	0.100	0.044	0.067	22,327
2014	13,271	589,472	10.5	160	254	0.067	0.101	0.044	0.066	22,514
2015	13,590	598,736	10.6	162	257	0.067	0.102	0.043	0.065	22,698
2016	13,917	607,971	10.7	165	261	0.068	0.102	0.042	0.064	22,890

* This form is to be filled out by all distribution utilities

1990-2001	2.5%	2.1%	1.8%	1.9%	1.8%			-2.9%	-2.1%	0.4%
2003-2004	2.4%	1.7%	0.7%	1.4%	1.4%			-1.6%	-1.6%	0.7%
2008-2011	2.4%	1.6%	0.9%	1.6%	1.4%			-1.5%	-1.5%	0.8%
2003-2011	2.4%	1.6%	0.8%	1.6%	1.4%			-1.6%	-1.6%	0.8%

STANISLAUS COUNTY PERSONAL INCOME (\$1996M)

Source: Woods & Poole Economics Stanislaus County 2004 Data Pamphlet (Annual Avg Number)

STANISLAUS COUNTY POPULATION (000s)

Source: Woods & Poole Economics Stanislaus County 2004 Data Pamphlet (MidYear)

STANISLAUS COUNTY AGRICULTURAL SERVICES EMPLOYEMENT (000)

Source: Woods & Poole Economics Stanislaus County 2004 Data Pamphlet (Annual Avg Number)

AGRICULTURAL SERVICES INCOME (\$1996M)

Source: Woods & Poole Economics Stanislaus County 2004 Data Pamphlet (Annual Avg Number)

STANISLAUS COUNTY TOTAL EMPLOYMENT (000)

Source: Woods & Poole Economics Stanislaus County 2004 Data Pamphlet (Annual Avg Number)

INDUSTRIAL ELECTRICITY PRICE (\$/kWh)

Source:

Years 1990 to 2003 is based on historical data, years 2004 and 2005 are assumed to be the same as 2003

Years 2006 through 2016 are escalated by 1%.

COMMERCIAL ELECTRICITY PRICE (\$/kWh)

Source:

Years 1990 to 2003 is based on historical data, years 2004 and 2005 are assumed to be the same as 2003

Years 2006 through 2016 are escalated by 1%.

INDUSTRIAL ELECTRICITY PRICE (1996\$/kWh)

Calculated by taking the TID historical Industrial Electricity Price and dividing it by a Personal Consumption Expenditure Deflator

(The Personal Consumption Expenditure Deflator is given on Form 2.1)

COMMERCIAL ELECTRICITY PRICE (1996\$/kWh)

Calculated by taking the TID historical Industrial Electricity Price and dividing it by a Personal Consumption Expenditure Deflator

(The Personal Consumption Expenditure Deflator is given on Form 2.1)

INCOME PER CAPITA IN \$1996

Calculated by taking "Personal Income in \$1996M" from Woods and Poole Economics and multiplying it by 1,000,000 and then dividing it by the

"Population" from Woods and Poole Economics.